

# SPS-300 Series AC Power Supply System



■ High Efficiency

■ High Precision

■ High Stability

# SPS-300 Series AC Power Supply System



| Output        |             |               | Connection Type     | Model                | Size                | Standard Interface   | Optional Information | Certificates        |                  |                     |     |
|---------------|-------------|---------------|---------------------|----------------------|---------------------|----------------------|----------------------|---------------------|------------------|---------------------|-----|
| Rated Voltage | Rated Power | Rated Current |                     |                      |                     |                      |                      |                     |                  |                     |     |
| 150V/300V     | 1200W       | 10.08A/5.04A  | 1-Phase             | 2 Parallel           | 9U <sup>4</sup>     | SPS300VAC1200W-2-9   | (1)                  | CE                  |                  |                     |     |
| 150V/300V     | 2000W       | 15.56A/8.28A  |                     |                      |                     | SPS300VAC2000W-2-9   |                      |                     | RS232/RS485/USB  |                     |     |
| 150V/300V     | 3000W       | 24.84A/12.42A |                     |                      |                     | SPS300VAC3000W-2-9   |                      |                     | RS232/RS485/USB  |                     |     |
| 150V/300V     | 4000W       | 28.8A/14.4A   |                     |                      | 17U <sup>5</sup>    | SPS300VAC4000W-3-17  | RS232/RS485/USB/LAN  |                     | (1)              |                     |     |
| 150V/300V     | 6000W       | 49.68A/24.84A |                     |                      |                     | SPS300VAC6000W-4-17  | RS232/RS485/USB/LAN  |                     |                  |                     |     |
| 150V/300V     | 8000W       | 57.6A/28.8A   |                     |                      |                     | SPS300VAC8000W-4-17  | RS232/RS485/USB/LAN  |                     |                  |                     |     |
| 150V/300V     | 10000W      | 82.8A/41.4A   |                     |                      |                     | SPS300VAC10000W-4-17 | RS232/RS485/USB/LAN  |                     |                  |                     |     |
| 150V/300V     | 1800W       | 15.12A/7.56A  |                     |                      |                     | SPS300VAC1800W-2-9   | RS232/RS485/USB      |                     |                  |                     |     |
| 150V/300V     | 3000W       | 24.84A/12.42A | 1-Phase             | 3 Parallel           | 9U <sup>4</sup>     | SPS300VAC3000W-2-9   | (1)                  |                     |                  |                     |     |
| 150V/300V     | 4500W       | 37.26A/18.63A |                     |                      |                     | SPS300VAC4500W-2-9   |                      | RS232/RS485/USB     |                  |                     |     |
| 150V/300V     | 6000W       | 43.2A/21.6A   |                     |                      |                     | SPS300VAC6000W-3-17  |                      | RS232/RS485/USB/LAN |                  |                     |     |
| 150V/300V     | 9000W       | 74.52A/37.26A |                     |                      | 17U <sup>5</sup>    | SPS300VAC9000W-4-17  | RS232/RS485/USB/LAN  | (1)                 |                  |                     |     |
| 150V/300V     | 12000W      | 86.4A/43.2A   |                     |                      |                     | SPS300VAC12000W-4-17 | RS232/RS485/USB/LAN  |                     |                  |                     |     |
| 150V/300V     | 15000W      | 124.2A/62.1A  |                     |                      |                     | SPS300VAC15000W-4-17 | RS232/RS485/USB/LAN  |                     |                  |                     |     |
| 150V/300V     | 2400W       | 20.16A/10.08A |                     |                      |                     | 1-Phase              | 4 Parallel           |                     | 17U <sup>5</sup> | SPS300VAC2400W-2-17 | (1) |
| 150V/300V     | 4000W       | 33.12A/15.56A |                     |                      |                     |                      |                      |                     |                  | SPS300VAC4000W-2-17 |     |
| 150V/300V     | 6000W       | 49.68A/24.84A | SPS300VAC6000W-2-17 | RS232/RS485/USB      |                     |                      |                      |                     |                  |                     |     |
| 150V/300V     | 8000W       | 57.6A/28.8A   | SPS300VAC8000W-3-17 | RS232/RS485/USB/LAN  |                     |                      |                      |                     |                  |                     |     |
| 150V/300V     | 12000W      | 99.36A/49.68A | 21U <sup>6</sup>    | SPS300VAC12000W-4-21 | RS232/RS485/USB/LAN |                      |                      | (2)                 |                  |                     |     |
| 150V/300V     | 16000W      | 115.2A/57.6A  |                     | SPS300VAC16000W-4-21 | RS232/RS485/USB/LAN |                      |                      |                     |                  |                     |     |
| 150V/300V     | 20000W      | 165.6A/82.8A  |                     | SPS300VAC20000W-4-21 | RS232/RS485/USB/LAN |                      |                      |                     |                  |                     |     |
| 300V/600V     | 1200W       | 5.04A/2.52A   |                     | 1-Phase              | 2 Series            |                      |                      |                     | 9U <sup>4</sup>  | SPS600VAC1200W-2-9  | (1) |
| 300V/600V     | 2000W       | 8.28A/4.14A   | SPS600VAC2000W-2-9  |                      |                     | RS232/RS485/USB      |                      |                     |                  |                     |     |
| 300V/600V     | 3000W       | 12.42A/6.21A  | SPS600VAC3000W-2-9  |                      |                     | RS232/RS485/USB      |                      |                     |                  |                     |     |
| 300V/600V     | 4000W       | 14.4A/7.2A    | 17U <sup>5</sup>    |                      |                     | SPS600VAC4000W-3-17  | RS232/RS485/USB/LAN  | (1)                 |                  |                     |     |
| 300V/600V     | 6000W       | 24.84A/12.42A |                     |                      |                     | SPS600VAC6000W-4-17  | RS232/RS485/USB/LAN  |                     |                  |                     |     |
| 300V/600V     | 8000W       | 28.8A/14.4A   |                     |                      |                     | SPS600VAC8000W-4-17  | RS232/RS485/USB/LAN  |                     |                  |                     |     |
| 300V/600V     | 10000W      | 41.4A/20.7A   |                     |                      |                     | SPS600VAC10000W-4-17 | RS232/RS485/USB/LAN  |                     |                  |                     |     |
| 300V/600V     | 10000W      | 41.4A/20.7A   |                     |                      |                     | SPS600VAC10000W-4-17 | RS232/RS485/USB/LAN  |                     |                  |                     |     |

## Dimensions & Weight



## Optional Information

(1) LAN & GPIB interface card & cables



(2) GPIB interface card & cable



## Features

- Large touch color screen, possess complete functions and easy to operate.
- AC+DC mixed or independent output mode for voltage DC offset simulation.
- Capable of setting output slope/phase angle, 0~359.9°.
- Output frequency 15~1000Hz, capable of setting output slope of voltage and frequency.
- High output crest factor could satisfy surge tests requirements.
- Multiple current measuring level selection. Increase measurement accuracy.
- Standard USB data interface, support CSV file waveform import.
- OCP/OVP/OPP/OTP/ Short circuit protection.
- Built-in power meter, which is capable of measuring 15 electrical parameters per phase, including voltage, current, power, etc.
- With reverse current protection to avoid current flowing backward.
- Capable of setting voltage and current output restriction, support for constant current output mode.

## Panel Introduction

### 0.6 - 1.5kVA

- 1 Power Switch (Up), USB Interface (Down)
- 2 Color Touch Screen
- 3 Multifunctional Keys
- 4 Numeric and Functional Keys

#### Front Panel Introduction



### 2 - 5kVA

- 1 Power Switch (Up), USB Interface (Down)
- 2 Color Touch Screen
- 3 Multifunctional Keys
- 4 Numeric and Functional Keys

#### Front Panel Introduction

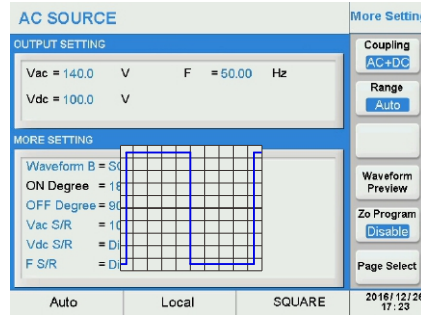
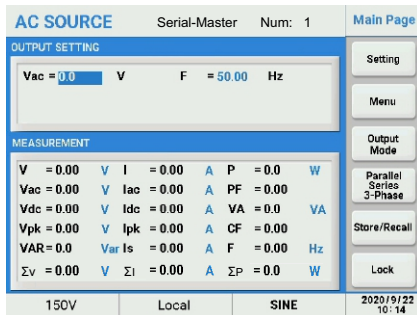


# SPS-300 Series AC Power Supply System

## Function Introduction

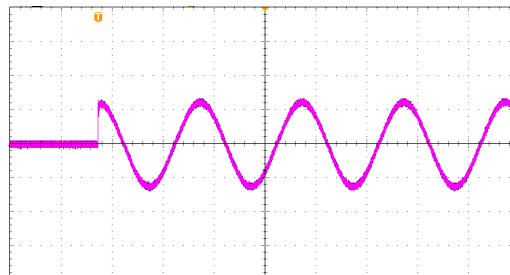
### Graphical User Interface

The large color touch screen provides simple and fast operation for customers, real-time update of display output data and power status, and graphical display makes it more intuitive.



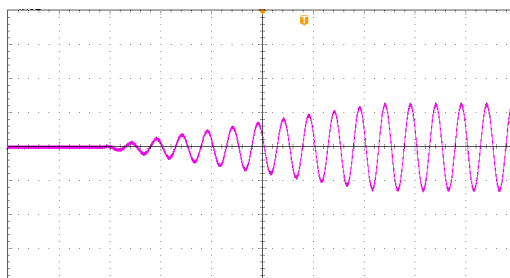
### Settable ON/OFF Phase Angle of Output Waveform

This series of AC power supply can set the ON phase and OFF phase of sinusoidal output waveform, suitable for the output test of switching power supply. Set the ON angle to 90 degrees for surge current testing, the power supply will show the measured value of surge current. Users can set when start to measure the surge current and the duration of the measurement.



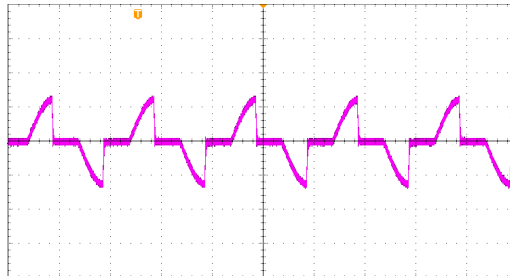
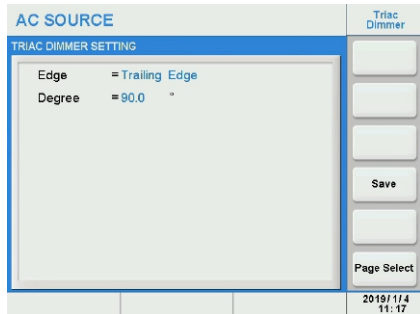
### Slew Rate Setting For Voltage and Frequency

This series AC power supply let users set the slew rate of voltage and frequency, in such application in order to reduce the inrush current during motor or compressor startup.



## Triac Dimmer Function

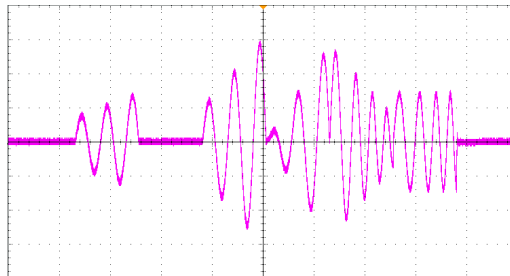
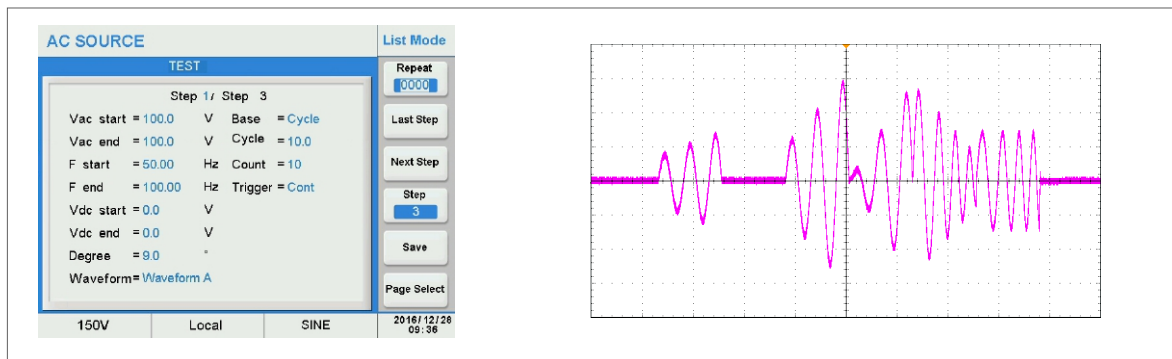
This series AC power supply built-in triac dimmer function, which is used to do dimming and speed regulating test for lamp or electric motor to ensure the products work well both in R&D and production testing.



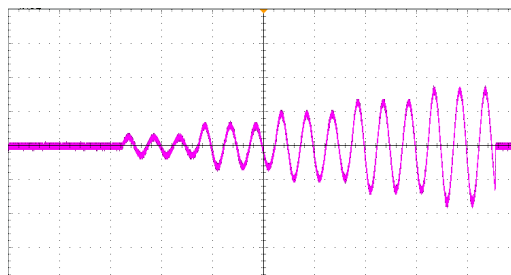
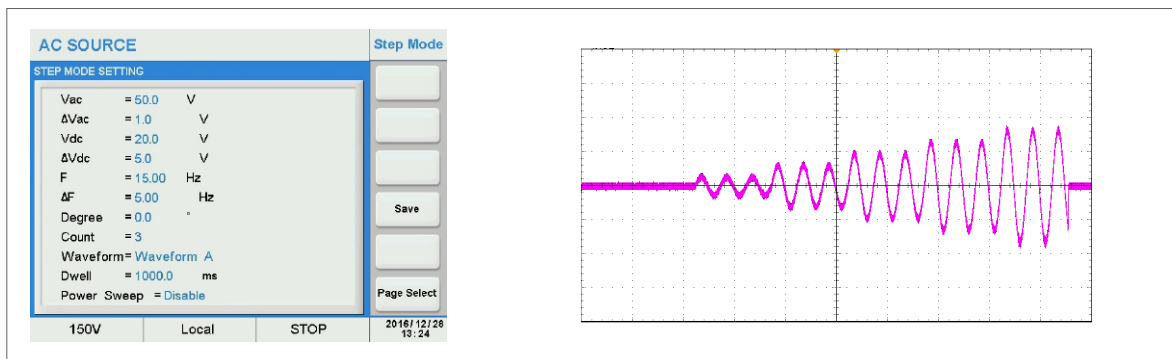
## Power Line Disturbance Simulation

This series AC power supply provides powerful function to simulate all kinds of power line disturbance conditions such as cycle dropout, transient spike, brown out and etc. This feature make this series AC power supply ideal for R&D labs, universities and certification labs.

### LIST Mode



### STEP Mode



# SPS-300 Series AC Power Supply System

## PULSE Mode

**AC SOURCE** Pulse Mode

**PULSE MODE SETTING**

Vac = 50.0 V

Vdc = 30.0 V

F = 15.00 Hz

Duty Cycle = 50.0 %

Degree = 0.0 °

Waveform = Waveform A

Period = 100.0 ms

Count = 3

Start = 0.0 ms

Save

Page Select

150V Local STOP 2016/12/26 13:09

## Voltage Sags/Voltage Spikes

**AC SOURCE** Transient

**TRANSIENT SETTING**

Trans-Start = 18.0 ms

Trans-Volt = 424.2 V

Trans-Time = 2.0 ms

Trans-Count = 9999

Save

Page Select

2016/12/29 11:43

**Voltage Sags**

**Voltage Spikes**

## File Save and Recall Via The USB Interface

The user can save the screenshot via the USB interface in the front panel. The user can import a CSV file via the USB interface to generate waveform output.

**AC SOURCE** Main Page

**OUTPUT SETTING**

Vac = 0.0 V F = 0.00 Hz

**USB**

**MEASUREMENT**

V = 0.00

Vac = 0.00

Vdc = 0.00

Vpk = 0.00

VAR = 0.00

Flash Disk is Ready!  
 Press ENTER Button To Save!  
 Press 2 Button To Read License!  
 Press 3 Button To Write PLUSE File!  
 Press 4 Button To Read PLUSE File!  
 Press 5 Button To Write STEP File!  
 Press 6 Button To Read STEP File!  
 Press 7 Button To Write List File!  
 Press 8 Button To Read List File!

Setting

Menu

Output Mode

Phase

Store/Recall

Lock

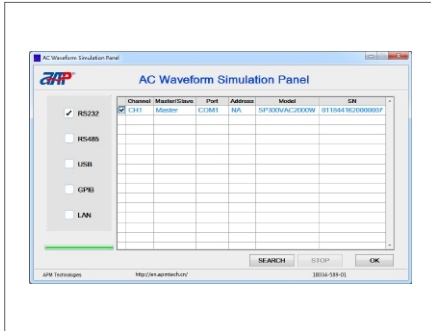
150V Local SINE 2080/01/10 04:07

|    | A    | B  | C | D | E     | F  | G  | H   | I   | J  | K   | L | M | N     | O  | P | Q | R | S |
|----|------|----|---|---|-------|----|----|-----|-----|----|-----|---|---|-------|----|---|---|---|---|
| 1  | Last |    |   |   |       |    |    |     |     |    |     |   |   |       |    |   |   |   |   |
| 2  | 24   | 23 | 9 | 1 | Coast | 10 | 9A | 100 | 100 | 50 | 100 | 0 | 0 | Cycle | 10 |   |   |   |   |
| 3  | 24   | 23 | 9 | 2 | Coast | 10 | 9A | 100 | 100 | 50 | 100 | 0 | 0 | Cycle | 10 |   |   |   |   |
| 4  | 24   | 23 | 9 | 3 | Coast | 10 | 9A | 100 | 100 | 50 | 100 | 0 | 0 | Cycle | 10 |   |   |   |   |
| 5  | 24   | 23 | 9 | 4 | Coast | 10 | 9A | 100 | 100 | 50 | 100 | 0 | 0 | Cycle | 10 |   |   |   |   |
| 6  | 24   | 23 | 9 | 5 | Coast | 10 | 9A | 100 | 100 | 50 | 100 | 0 | 0 | Cycle | 10 |   |   |   |   |
| 7  | 24   | 23 | 9 | 6 | Coast | 10 | 9A | 100 | 100 | 50 | 100 | 0 | 0 | Cycle | 10 |   |   |   |   |
| 8  | 24   | 23 | 9 | 7 | Coast | 10 | 9A | 100 | 100 | 50 | 100 | 0 | 0 | Cycle | 10 |   |   |   |   |
| 9  | 24   | 23 | 9 | 8 | Coast | 10 | 9A | 100 | 100 | 50 | 100 | 0 | 0 | Cycle | 10 |   |   |   |   |
| 10 | 24   | 23 | 9 | 9 | Coast | 10 | 9A | 100 | 100 | 50 | 100 | 0 | 0 | Cycle | 10 |   |   |   |   |
| 11 |      |    |   |   |       |    |    |     |     |    |     |   |   |       |    |   |   |   |   |
| 12 |      |    |   |   |       |    |    |     |     |    |     |   |   |       |    |   |   |   |   |

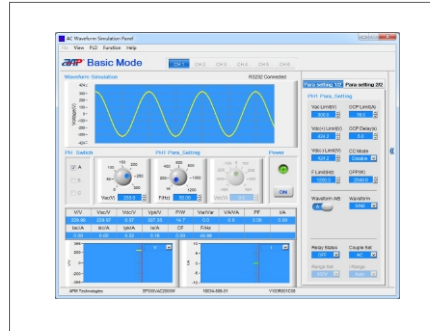
## Monitoring Software

AC Waveform Simulation Panel is a graphical user interface that provides extraordinary capabilities and convenience by delivering control of the unit remotely, which covers all functions of panel operation.

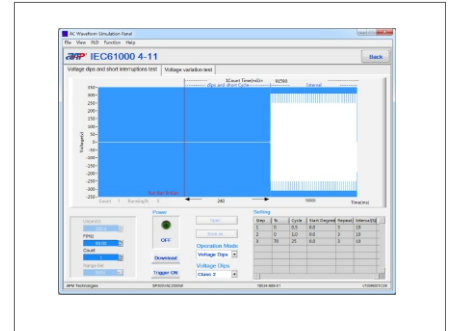
Login Interface



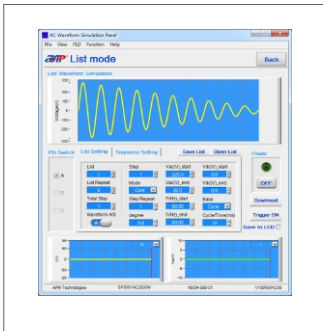
Basic mode(Main interface)



IEC61000 4-11 interface



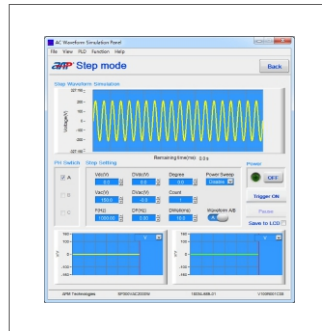
List mode interface



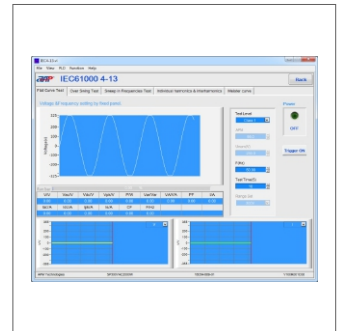
Pulse mode interface



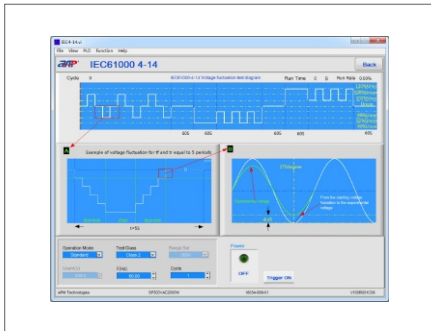
Step mode interface



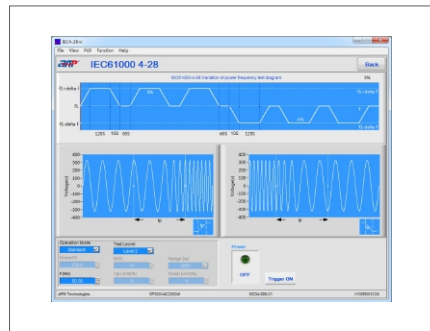
IEC61000 4-13 interface



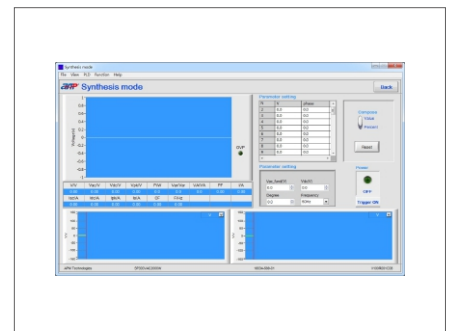
IEC61000 4-14 interface



IEC61000 4-28 interface



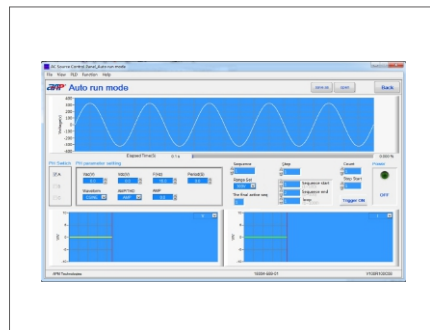
Synthesis mode interface



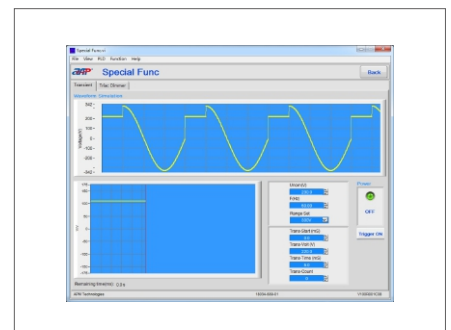
Harmonics Measure mode interface



Auto run mode interface



Special Func interface



# SPS-300 Series AC Power Supply System

| MODEL                                | SPS300VAC1200W-2-9                                                                                                         |                                                                                                       | SPS300VAC1800W-2-9 |           | SPS300VAC2400W-2-17 |         |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|--------------------|-----------|---------------------|---------|
| <b>Input</b>                         |                                                                                                                            |                                                                                                       |                    |           |                     |         |
| Voltage                              | 90~265VAC                                                                                                                  |                                                                                                       |                    |           |                     |         |
| Frequency                            | 47~63Hz                                                                                                                    |                                                                                                       |                    |           |                     |         |
| Phase                                | 3 Phase, 4Wire+Groud/Y Connect                                                                                             |                                                                                                       |                    |           |                     |         |
| Max.Current                          | 20A                                                                                                                        |                                                                                                       | 30A                |           | 40A                 |         |
| Power Factor at 220VAC Input, Full   | ≥0.91, Active PFC                                                                                                          |                                                                                                       |                    |           |                     |         |
| Efficiency                           | >82% (Peak)<br>>80% at 220VAC, 50Hz input/230VAC, 50Hz output)                                                             |                                                                                                       |                    |           |                     |         |
| <b>Output</b>                        |                                                                                                                            |                                                                                                       |                    |           |                     |         |
| AC Power(Total) <sup>(1)</sup>       | 1080VA                                                                                                                     |                                                                                                       | 1620VA             |           | 2160VA              |         |
| Max.Current (r.m.s) <sup>(1)</sup>   | 0~150V(L)                                                                                                                  | 10.08A                                                                                                |                    | 15.12A    |                     | 20.16A  |
|                                      | 0~300V(H)                                                                                                                  | 5.04A                                                                                                 |                    | 7.56A     |                     | 10.08A  |
| Max.Current (Peak) <sup>(1)</sup>    | 0~150V(L)                                                                                                                  | 58.32A                                                                                                |                    | 87.48A    |                     | 116.64A |
|                                      | 0~300V(H)                                                                                                                  | 29.16A                                                                                                |                    | 43.74A    |                     | 58.32A  |
| Voltage(AC)                          | Range                                                                                                                      | 0~300VAC, 150V/300V/Auto                                                                              |                    |           |                     |         |
|                                      | Resolution                                                                                                                 | 0.1V                                                                                                  |                    |           |                     |         |
|                                      | Accuracy                                                                                                                   | 0.2% of setting + 0.8%F.S, at Voltage >3V                                                             |                    |           |                     |         |
| Phase Angle (Starting /Ending)       | Range                                                                                                                      | 0~359.9°                                                                                              |                    |           |                     |         |
|                                      | Resolution                                                                                                                 | 0.1°                                                                                                  |                    |           |                     |         |
|                                      | Accuracy                                                                                                                   | ±1° @45~65HZ                                                                                          |                    |           |                     |         |
| Current OC Fold Mode                 | Range                                                                                                                      | 0.1A                                                                                                  |                    |           |                     |         |
|                                      | Resolution                                                                                                                 | 2.0% of setting + 2.0%F.S.                                                                            |                    |           |                     |         |
|                                      | Response Time                                                                                                              | <1400ms                                                                                               |                    |           |                     |         |
| Frequency                            | Range                                                                                                                      | 15~1000HZ Full Range Adjust                                                                           |                    |           |                     |         |
|                                      | Resolution                                                                                                                 | 0.1Hz at 15.0~99.9Hz, 1Hz at 100~1000Hz                                                               |                    |           |                     |         |
|                                      | Accuracy                                                                                                                   | 0.03% of setting                                                                                      |                    |           |                     |         |
| Voltage(DC)                          | Range                                                                                                                      | 0~424Vdc, 212V/424V/Auto                                                                              |                    |           |                     |         |
|                                      | Resolution                                                                                                                 | 0.1V                                                                                                  |                    |           |                     |         |
|                                      | Accuracy                                                                                                                   | 0.3% of setting + 0.8%F.S, at Voltage >3V                                                             |                    |           |                     |         |
| Max.Current(L/H Range)(Total)        | 0~150V(L)                                                                                                                  | L 7.128A                                                                                              | L 10.692A          | L 14.256A |                     |         |
|                                      | 0~300V(H)                                                                                                                  | H 3.402A                                                                                              | H 5.103A           | H 6.804A  |                     |         |
| Ripple & Noise(r.m.s)                | L <1000mVrms @ Bandwidth 20HZ to 1MHZ                                                                                      |                                                                                                       |                    |           |                     |         |
|                                      | H <1500mVrms @ Bandwidth 20HZ to 1MHZ                                                                                      |                                                                                                       |                    |           |                     |         |
| Ripple & Noise(Peak)                 | <4000mVp-p @ Bandwidth 20HZ to 1MHZ                                                                                        |                                                                                                       |                    |           |                     |         |
| <b>Other Parameters</b>              |                                                                                                                            |                                                                                                       |                    |           |                     |         |
| Total Harmonic Distortion(THD)       | <0.5% (Resistive Load) at 15.0~70.0Hz and output voltage within the 80~140VAC at Low Range or the 160~280VAC at High Range |                                                                                                       |                    |           |                     |         |
|                                      | <1% (Resistive Load) at 70.1~500Hz and output voltage within the 80~140VAC at Low Range or the 160~280VAC at High Range    |                                                                                                       |                    |           |                     |         |
|                                      | <1.5% (Resistive Load) at 501~1000Hz and output voltage within the 80~140VAC at Low Range or the 160~280VAC at High Range  |                                                                                                       |                    |           |                     |         |
| Crest Factor(CF)                     | ≤6                                                                                                                         |                                                                                                       |                    |           |                     |         |
| Load Regulation                      | ± 0.5%F.S. @ 15~100HZ (Resistive Load)                                                                                     |                                                                                                       |                    |           |                     |         |
|                                      | ± 0.8%F.S. @ Others Freq (Resistive Load)                                                                                  |                                                                                                       |                    |           |                     |         |
| Line Regulation                      | ± 0.1V                                                                                                                     |                                                                                                       |                    |           |                     |         |
| Programmable Output Impedance        | Not Support                                                                                                                |                                                                                                       |                    |           |                     |         |
| Harmonic & Interharmonics Simulation | Not Support                                                                                                                |                                                                                                       |                    |           |                     |         |
| <b>Measurent(Master)</b>             |                                                                                                                            |                                                                                                       |                    |           |                     |         |
| Voltage                              | Range                                                                                                                      | AC 0~300VAC<br>DC 0~424VDC                                                                            |                    |           |                     |         |
|                                      | Resolution                                                                                                                 | 0.1V                                                                                                  |                    |           |                     |         |
|                                      | Accuracy                                                                                                                   | AC 0.2% of setting + 0.4%F.S. (Notes: Vpeak: 0.6% of setting+1%F.S.)<br>DC 0.3% of setting + 0.4%F.S. |                    |           |                     |         |
| Frequency                            | Range                                                                                                                      | 15~1000HZ                                                                                             |                    |           |                     |         |
|                                      | Resolution                                                                                                                 | 0.1Hz(15.0~99.9Hz), 1Hz(100~1000Hz)                                                                   |                    |           |                     |         |
|                                      | Accuracy                                                                                                                   | 0.1% of setting                                                                                       |                    |           |                     |         |
| Current(r.m.s)                       | Range                                                                                                                      | H 0.15A~5.6A                                                                                          |                    |           |                     |         |
|                                      |                                                                                                                            | M -                                                                                                   |                    |           |                     |         |
|                                      |                                                                                                                            | L 0.1A~3A                                                                                             |                    |           |                     |         |
|                                      |                                                                                                                            | mA -                                                                                                  |                    |           |                     |         |
|                                      | Resolution                                                                                                                 | 0.01A                                                                                                 |                    |           |                     |         |
| Accuracy                             | 0.4%+1.0%F.S                                                                                                               |                                                                                                       |                    |           |                     |         |



# SPS-300 Series AC Power Supply System

| MODEL                                 |                      | SPS300VAC1200W-2-9                                                               | SPS300VAC1800W-2-9      | SPS300VAC2400W-2-17   |
|---------------------------------------|----------------------|----------------------------------------------------------------------------------|-------------------------|-----------------------|
| Current(Peak)                         | Range                | 0A~32.4A                                                                         |                         |                       |
|                                       | Resolution           | 0.01A                                                                            |                         |                       |
|                                       | Accuracy             | 0.4%+1.5%F.S.                                                                    |                         |                       |
| Power                                 | Range                | 0~600W                                                                           |                         |                       |
|                                       | Resolution           | 0.1W                                                                             |                         |                       |
|                                       | Accuracy             | 0.4% of setting + 1%F.S. at PF>0.2, Voltage >5V                                  |                         |                       |
| Power Apparent (VA)                   | Range                | 0~612VA                                                                          |                         |                       |
|                                       | Resolution           | 0.1VA                                                                            |                         |                       |
|                                       | Accuracy             | Voltage * I <sub>rms</sub> , Calculated value                                    |                         |                       |
| Power Resistive (VAR)                 | Range                | 0~612VAR                                                                         |                         |                       |
|                                       | Resolution           | 0.1VAR                                                                           |                         |                       |
|                                       | Accuracy             | $\sqrt{(VA)^2 - (W)^2}$ , Calculated value                                       |                         |                       |
| Power Factor (PF)                     | Range                | 0.00~1.00                                                                        |                         |                       |
|                                       | Resolution           | 0.01                                                                             |                         |                       |
|                                       | Accuracy             | W/VA, Calculated value                                                           |                         |                       |
| Harmonic                              |                      | Not Support                                                                      |                         |                       |
| Σ Current                             | Range <sup>[1]</sup> | H 0.15A~10.08A                                                                   | H 0.15A~15.12A          | H 0.15A~20.16A        |
|                                       |                      | M -                                                                              |                         |                       |
|                                       |                      | L 0.1A~5.4A                                                                      | L 0.1A~8.1A             | L 0.1A~10.8A          |
|                                       | Resolution           | 0.01A                                                                            |                         |                       |
|                                       | Accuracy             | 0.4%+1.0%F.S.                                                                    |                         |                       |
| Σ Current                             | Range <sup>[1]</sup> | 0~1080W                                                                          | 0~1620W                 | 0~2160W               |
|                                       | Resolution           | 0.1W                                                                             |                         |                       |
|                                       | Accuracy             | 0.4% of setting + 0.3%F.S at PF >0.2, Voltage > 5V                               |                         |                       |
| <b>Extra Function</b>                 |                      |                                                                                  |                         |                       |
| Remote Sense                          | Range                | 5V(rms), Max. Total power less than rated power                                  |                         |                       |
| Slew Rate                             | Range                | AC Voltage 0.001~1200.000V/ms and Disable                                        |                         |                       |
|                                       |                      | DC Voltage 0.001~1000.000V/ms and Disable                                        |                         |                       |
|                                       |                      | Frequency 0.001~1600.000HZ/ms and Disable                                        |                         |                       |
| Transient Generator(only for 15-70HZ) | Range                | Trans-Start : 0.0~66.5ms@15Hz , Resolution : 0.1ms                               |                         |                       |
|                                       |                      | Trans-Volt : -212V~+212V(L), -424V~+424V(H), Resolution : 0.1V                   |                         |                       |
|                                       |                      | Trans-Time : 0.0~66.5ms@15Hz , Resolution : 0.1ms                                |                         |                       |
|                                       |                      | Trans-Cycle : 0~9999, Constant                                                   |                         |                       |
| Calibration <sup>[2]</sup>            |                      | Firmware-based calibration through the digital interface or front panel          |                         |                       |
| Graphic Display                       |                      | 4.3" Color touch LCD                                                             |                         |                       |
| Operation Key Feature                 |                      | Soft key, Numeric key, Rotary Knob, USB port for transfer and upgrading firmware |                         |                       |
| Rack mount Handles                    |                      | Yes                                                                              |                         |                       |
| FAN                                   |                      | Temperature Control                                                              |                         |                       |
| Protection Circuits                   |                      | OCP, OVP, OPP, OTP, RCP, PRI_UVP, PRI_OVP, PRI_OTP, PRI_OCP, USB_OCP             |                         |                       |
| Interface                             |                      | Standard USB, RS-485, RS-232, GPIB & LAN is Optional                             |                         |                       |
| <b>Environment</b>                    |                      |                                                                                  |                         |                       |
| Operating Temperature                 |                      | 0°C~40°C                                                                         |                         |                       |
| Storage Temperature                   |                      | -40°C~85°C                                                                       |                         |                       |
| Fan Noise                             |                      | 55dB Min; 76dB Max.                                                              | 56.8dB Min; 77.8dB Max. | 58dB Min; 79dB Max.   |
| Altitude                              |                      | 2000m                                                                            |                         |                       |
| Relative Humidity                     |                      | 5%~95%, non-condensing                                                           |                         |                       |
| Temperature Coefficient               |                      | 100ppm/°C at Voltage, 300ppm/°C at Current, 100ppm/°C at Frequency               |                         |                       |
| <b>Mechanical</b>                     |                      |                                                                                  |                         |                       |
| Dimensions(WxHxD)                     |                      | 540.0x400.0x640.0 mm                                                             | 540.0x400.0x640.0 mm    | 560.0x754.0x700.0 mm  |
| Package Dimensions(W x H x D)         |                      | 660.0x710.0x760.0 mm                                                             | 660.0x710.0x760.0 mm    | 680.0x1120.0x860.0 mm |
| Unit Weight                           |                      | 72.8kg                                                                           | 88.7kg                  | 133.6kg               |
| Shipping Weight                       |                      | 89.7kg                                                                           | 108.7kg                 | 172.0kg               |
| <b>Regulatory Compliance</b>          |                      |                                                                                  |                         |                       |
| CE Mark                               |                      | Installation Overvoltage Category II; Class II equipment; indoor use only.       |                         |                       |

[1] In parallel mode, the amount needed to be reduced to 90 %

[2] Calibration function only available for single unit.

All specifications are subject to change without notice.

# SPS-300 Series AC Power Supply System

| MODEL                                | SPS300VAC2000W-2-9                                                                                                         |                                                                                                       | SPS300VAC3000W-2-9 |          | SPS300VAC4000W-2-17 |          |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|--------------------|----------|---------------------|----------|
| <b>Input</b>                         |                                                                                                                            |                                                                                                       |                    |          |                     |          |
| Voltage                              | 90~265VAC                                                                                                                  |                                                                                                       |                    |          |                     |          |
| Frequency                            | 47~63Hz                                                                                                                    |                                                                                                       |                    |          |                     |          |
| Phase                                | 3 Phase, 4Wire+Groud/Y Connect                                                                                             |                                                                                                       |                    |          |                     |          |
| Max.Current                          | 30A                                                                                                                        |                                                                                                       | 45A                |          | 60A                 |          |
| Power Factor at 220VAC Input, Full   | ≥0.95, Active PFC                                                                                                          |                                                                                                       |                    |          |                     |          |
| Efficiency                           | >86% (Peak)                                                                                                                |                                                                                                       |                    |          |                     |          |
|                                      | >84% at 220VAC, 50Hz input/230VAC, 50Hz output)                                                                            |                                                                                                       |                    |          |                     |          |
| <b>Output</b>                        |                                                                                                                            |                                                                                                       |                    |          |                     |          |
| AC Power(Total) <sup>(1)</sup>       | 1800VA                                                                                                                     |                                                                                                       | 2700VA             |          | 3600VA              |          |
| Max.Current (r.m.s) <sup>(1)</sup>   | 0~150V(L)                                                                                                                  | 16.56A                                                                                                |                    | 24.84A   |                     | 33.12A   |
|                                      | 0~300V(H)                                                                                                                  | 8.28A                                                                                                 |                    | 12.42A   |                     | 16.56A   |
| Max.Current (Peak) <sup>(1)</sup>    | 0~150V(L)                                                                                                                  | 99.36A                                                                                                |                    | 149.04A  |                     | 198.72A  |
|                                      | 0~300V(H)                                                                                                                  | 49.68A                                                                                                |                    | 74.52A   |                     | 99.36A   |
| Voltage(AC)                          | Range                                                                                                                      | 0~300VAC, 150V/300V/Auto                                                                              |                    |          |                     |          |
|                                      | Resolution                                                                                                                 | 0.1V                                                                                                  |                    |          |                     |          |
|                                      | Accuracy                                                                                                                   | 0.2% of setting + 0.8%F.S., at Voltage >3V                                                            |                    |          |                     |          |
| Phase Angle (Starting /Ending)       | Range                                                                                                                      | 0~359.9°                                                                                              |                    |          |                     |          |
|                                      | Resolution                                                                                                                 | 0.1°                                                                                                  |                    |          |                     |          |
|                                      | Accuracy                                                                                                                   | ±1° @45~65HZ                                                                                          |                    |          |                     |          |
| Current OC Fold Mode                 | Range                                                                                                                      | 0.1A                                                                                                  |                    |          |                     |          |
|                                      | Resolution                                                                                                                 | 2.0% of setting + 2.0%F.S.                                                                            |                    |          |                     |          |
|                                      | Response Time                                                                                                              | <1400ms                                                                                               |                    |          |                     |          |
| Frequency                            | Range                                                                                                                      | 15~1000HZ Full Range Adjust                                                                           |                    |          |                     |          |
|                                      | Resolution                                                                                                                 | 0.1Hz at 15.0~99.9Hz, 1Hz at 100~1000Hz                                                               |                    |          |                     |          |
|                                      | Accuracy                                                                                                                   | 0.03% of setting                                                                                      |                    |          |                     |          |
| Voltage(DC)                          | Range                                                                                                                      | 0~424Vdc, 212V/424V/Auto                                                                              |                    |          |                     |          |
|                                      | Resolution                                                                                                                 | 0.1V                                                                                                  |                    |          |                     |          |
|                                      | Accuracy                                                                                                                   | 0.3% of setting + 0.8%F.S., at Voltage >3V                                                            |                    |          |                     |          |
| Max.Current(L/H Range)(Total)        | 0~150V(L)                                                                                                                  | L 11.7A                                                                                               |                    | L 17.55A |                     | L 23.4A  |
|                                      | 0~300V(H)                                                                                                                  | H 5.94A                                                                                               |                    | H 8.91A  |                     | H 11.88A |
| Ripple & Noise(r.m.s)                | L <1000mVrms @ Bandwidth 20HZ to 1MHZ                                                                                      |                                                                                                       |                    |          |                     |          |
|                                      | H <1500mVrms @ Bandwidth 20HZ to 1MHZ                                                                                      |                                                                                                       |                    |          |                     |          |
| Ripple & Noise(Peak)                 | <4000mVp-p @ Bandwidth 20HZ to 1MHZ                                                                                        |                                                                                                       |                    |          |                     |          |
| <b>Other Parameters</b>              |                                                                                                                            |                                                                                                       |                    |          |                     |          |
| Total Harmonic Distortion(THD)       | <0.5% (Resistive Load) at 15.0~70.0Hz and output voltage within the 80~140VAC at Low Range or the 160~280VAC at High Range |                                                                                                       |                    |          |                     |          |
|                                      | <1% (Resistive Load) at 70.1~500Hz and output voltage within the 80~140VAC at Low Range or the 160~280VAC at High Range    |                                                                                                       |                    |          |                     |          |
|                                      | <1.5% (Resistive Load) at 501~1000Hz and output voltage within the 80~140VAC at Low Range or the 160~280VAC at High Range  |                                                                                                       |                    |          |                     |          |
| Crest Factor(CF)                     | ≤6                                                                                                                         |                                                                                                       |                    |          |                     |          |
| Load Regulation                      | ± 0.5%F.S. @ 15~100HZ (Resistive Load)                                                                                     |                                                                                                       |                    |          |                     |          |
|                                      | ± 0.8%F.S. @ Others Freq (Resistive Load)                                                                                  |                                                                                                       |                    |          |                     |          |
| Line Regulation                      | ± 0.1V                                                                                                                     |                                                                                                       |                    |          |                     |          |
| Programmable Output Impedance        | Not Support                                                                                                                |                                                                                                       |                    |          |                     |          |
| Harmonic & Interharmonics Simulation | Not Support                                                                                                                |                                                                                                       |                    |          |                     |          |
| <b>Measurent(Master)</b>             |                                                                                                                            |                                                                                                       |                    |          |                     |          |
| Voltage                              | Range                                                                                                                      | AC 0~300VAC<br>DC 0~424VDC                                                                            |                    |          |                     |          |
|                                      | Resolution                                                                                                                 | 0.1V                                                                                                  |                    |          |                     |          |
|                                      | Accuracy                                                                                                                   | AC 0.2% of setting + 0.4%F.S. (Notes: Vpeak: 0.6% of setting+1%F.S.)<br>DC 0.3% of setting + 0.4%F.S. |                    |          |                     |          |
| Frequency                            | Range                                                                                                                      | 15~1000HZ                                                                                             |                    |          |                     |          |
|                                      | Resolution                                                                                                                 | 0.1Hz(15.0~99.9Hz), 1Hz(100~1000Hz)                                                                   |                    |          |                     |          |
|                                      | Accuracy                                                                                                                   | 0.1% of setting                                                                                       |                    |          |                     |          |
| Current(r.m.s)                       | Range                                                                                                                      | H 0.15A~9.2A                                                                                          |                    |          |                     |          |
|                                      |                                                                                                                            | M -                                                                                                   |                    |          |                     |          |
|                                      |                                                                                                                            | L 0.1A~3A                                                                                             |                    |          |                     |          |
|                                      |                                                                                                                            | mA -                                                                                                  |                    |          |                     |          |
|                                      | Resolution                                                                                                                 | 0.01A                                                                                                 |                    |          |                     |          |
| Accuracy                             | 0.4%+1.0%F.S                                                                                                               |                                                                                                       |                    |          |                     |          |

# SPS-300 Series AC Power Supply System

| MODEL                                 |                                                                                  | SPS300VAC2000W-2-9                                             | SPS300VAC3000W-2-9    | SPS300VAC4000W-2-17 |                |
|---------------------------------------|----------------------------------------------------------------------------------|----------------------------------------------------------------|-----------------------|---------------------|----------------|
| Current(Peak)                         | Range                                                                            | 0A~55.2A                                                       |                       |                     |                |
|                                       | Resolution                                                                       | 0.01A                                                          |                       |                     |                |
|                                       | Accuracy                                                                         | 0.4%+1.5%F.S.                                                  |                       |                     |                |
| Power                                 | Range                                                                            | 0~1000W                                                        |                       |                     |                |
|                                       | Resolution                                                                       | 0.1W                                                           |                       |                     |                |
|                                       | Accuracy                                                                         | 0.4% of setting +1%F.S. at PF>0.2, Voltage >5V                 |                       |                     |                |
| Power Apparent (VA)                   | Range                                                                            | 0~1020VA                                                       |                       |                     |                |
|                                       | Resolution                                                                       | 0.1VA                                                          |                       |                     |                |
|                                       | Accuracy                                                                         | Voltage * I <sub>rms</sub> , Calculated value                  |                       |                     |                |
| Power Resistive (VAR)                 | Range                                                                            | 0~1020VAR                                                      |                       |                     |                |
|                                       | Resolution                                                                       | 0.1VAR                                                         |                       |                     |                |
|                                       | Accuracy                                                                         | $\sqrt{(VA)^2 - (W)^2}$ , Calculated value                     |                       |                     |                |
| Power Factor (PF)                     | Range                                                                            | 0.00~1.00                                                      |                       |                     |                |
|                                       | Resolution                                                                       | 0.01                                                           |                       |                     |                |
|                                       | Accuracy                                                                         | W/VA, Calculated value                                         |                       |                     |                |
| Harmonic                              |                                                                                  | Not Support                                                    |                       |                     |                |
| Σ Current                             | Range <sup>[1]</sup>                                                             | H                                                              | 0.15A~16.56A          | H 0.15A~24.84A      | H 0.15A~33.12A |
|                                       |                                                                                  | M                                                              |                       |                     |                |
|                                       |                                                                                  | L                                                              | 0.1A~5.4A             | L 0.1A~8.1A         | L 0.1A~10.8A   |
|                                       | Resolution                                                                       | 0.01A                                                          |                       |                     |                |
|                                       | Accuracy                                                                         | 0.4%+1.0%F.S.                                                  |                       |                     |                |
| Σ Current                             | Range <sup>[1]</sup>                                                             | 0~1800W                                                        | 0~2700W               | 0~3600W             |                |
|                                       | Resolution                                                                       | 0.1W                                                           |                       |                     |                |
|                                       | Accuracy                                                                         | 0.4% of setting +0.3%F.S at PF >0.2, Voltage > 5V              |                       |                     |                |
| <b>Extra Function</b>                 |                                                                                  |                                                                |                       |                     |                |
| Remote Sense                          | Range                                                                            | 5V(rms), Max. Total power less than rated power                |                       |                     |                |
| Slew Rate                             | Range                                                                            | AC Voltage 0.001~1200.000V/ms and Disable                      |                       |                     |                |
|                                       |                                                                                  | DC Voltage 0.001~1000.000V/ms and Disable                      |                       |                     |                |
|                                       |                                                                                  | Frequency 0.001~1600.000HZ/ms and Disable                      |                       |                     |                |
| Transient Generator(only for 15-70HZ) | Range                                                                            | Trans-Start : 0.0~66.5ms@15Hz , Resolution : 0.1ms             |                       |                     |                |
|                                       |                                                                                  | Trans-Volt : -212V~+212V(L), -424V~+424V(H), Resolution : 0.1V |                       |                     |                |
|                                       |                                                                                  | Trans-Time : 0.0~66.5ms@15Hz , Resolution : 0.1ms              |                       |                     |                |
|                                       |                                                                                  | Trans-Cycle : 0~9999, Constant                                 |                       |                     |                |
| Calibration <sup>[2]</sup>            | Firmware-based calibration through the digital interface or front panel          |                                                                |                       |                     |                |
| Graphic Display                       | 4.3" Color touch LCD                                                             |                                                                |                       |                     |                |
| Operation Key Feature                 | Soft key, Numeric key, Rotary Knob, USB port for transfer and upgrading firmware |                                                                |                       |                     |                |
| Rack mount Handles                    | Yes                                                                              |                                                                |                       |                     |                |
| FAN                                   | Temperature Control                                                              |                                                                |                       |                     |                |
| Protection Circuits                   | OCP, OVP, OPP, OTP, RCP, PRI_UVP, PRI_OVP, PRI_OTP, PRI_OCP, USB_OCP             |                                                                |                       |                     |                |
| Interface                             | Standard USB, RS-485, RS-232, GPIB & LAN is Optional                             |                                                                |                       |                     |                |
| <b>Environment</b>                    |                                                                                  |                                                                |                       |                     |                |
| Operating Temperature                 | 0°C~40°C                                                                         |                                                                |                       |                     |                |
| Storage Temperature                   | -40°C~85°C                                                                       |                                                                |                       |                     |                |
| Fan Noise                             | 55dB Min; 76dB Max.                                                              | 56.8dB Min; 77.8dB Max.                                        | 58dB Min; 79dB Max.   |                     |                |
| Altitude                              | 2000m                                                                            |                                                                |                       |                     |                |
| Relative Humidity                     | 5%~95%, non-condensing                                                           |                                                                |                       |                     |                |
| Temperature Coefficient               | 100ppm/°C at Voltage, 300ppm/°C at Current, 100ppm/°C at Frequency               |                                                                |                       |                     |                |
| <b>Mechanical</b>                     |                                                                                  |                                                                |                       |                     |                |
| Dimensions(WxHxD)                     | 540.0x400.0x640.0 mm                                                             | 540.0x400.0x640.0 mm                                           | 560.0x754.0x700.0 mm  |                     |                |
| Package Dimensions(W x H x D)         | 660.0x710.0x760.0 mm                                                             | 680.0x710.0x760.0 mm                                           | 680.0x1120.0x860.0 mm |                     |                |
| Unit Weight                           | 72.8kg                                                                           | 88.7kg                                                         | 133.6kg               |                     |                |
| Shipping Weight                       | 89.7kg                                                                           | 108.7kg                                                        | 172.0kg               |                     |                |
| <b>Regulatory Compliance</b>          |                                                                                  |                                                                |                       |                     |                |
| CE Mark                               | Installation Overvoltage Category II; Class II equipment; indoor use only.       |                                                                |                       |                     |                |

[1] In parallel mode, the amount needed to be reduced to 90 %

[2] Calibration function only available for single unit.

All specifications are subject to change without notice.

# SPS-300 Series AC Power Supply System

| MODEL                                | SPS300VAC3000W-2-9                                                                                                         |                                                                                                       | SPS300VAC4500W-2-9 |           | SPS300VAC6000W-2-17 |           |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|--------------------|-----------|---------------------|-----------|
| <b>Input</b>                         |                                                                                                                            |                                                                                                       |                    |           |                     |           |
| Voltage                              | 100~265VAC                                                                                                                 |                                                                                                       |                    |           |                     |           |
| Frequency                            | 47~63Hz                                                                                                                    |                                                                                                       |                    |           |                     |           |
| Phase                                | 3 Phase, 4Wire+Groud/Y Connect                                                                                             |                                                                                                       |                    |           |                     |           |
| Max.Current                          | 38A                                                                                                                        |                                                                                                       | 57A                |           | 76A                 |           |
| Power Factor at 220VAC Input, Full   | ≥0.97, Active PFC                                                                                                          |                                                                                                       |                    |           |                     |           |
| Efficiency                           | >87% (Peak)                                                                                                                |                                                                                                       |                    |           |                     |           |
|                                      | >86% at 220VAC, 50Hz input/230VAC, 50Hz output)                                                                            |                                                                                                       |                    |           |                     |           |
| <b>Output</b>                        |                                                                                                                            |                                                                                                       |                    |           |                     |           |
| AC Power(Total) <sup>(1)</sup>       | 2700VA                                                                                                                     |                                                                                                       | 4050VA             |           | 5400VA              |           |
| Max.Current (r.m.s) <sup>(1)</sup>   | 0~150V(L)                                                                                                                  | 24.84A                                                                                                |                    | 37.26A    |                     | 49.68A    |
|                                      | 0~300V(H)                                                                                                                  | 12.42A                                                                                                |                    | 18.63A    |                     | 24.84A    |
| Max.Current (Peak) <sup>(1)</sup>    | 0~150V(L)                                                                                                                  | 149.04A                                                                                               |                    | 223.56A   |                     | 298.08A   |
|                                      | 0~300V(H)                                                                                                                  | 74.52A                                                                                                |                    | 111.78A   |                     | 149.04A   |
| Voltage(AC)                          | Range                                                                                                                      | 0~300VAC, 150V/300V/Auto                                                                              |                    |           |                     |           |
|                                      | Resolution                                                                                                                 | 0.1V                                                                                                  |                    |           |                     |           |
|                                      | Accuracy                                                                                                                   | 0.2% of setting + 0.8%F.S, at Voltage >3V                                                             |                    |           |                     |           |
| Phase Angle (Starting /Ending)       | Range                                                                                                                      | 0~359.9°                                                                                              |                    |           |                     |           |
|                                      | Resolution                                                                                                                 | 0.1°                                                                                                  |                    |           |                     |           |
|                                      | Accuracy                                                                                                                   | ±1° @45~65HZ                                                                                          |                    |           |                     |           |
| Current OC Fold Mode                 | Range                                                                                                                      | 0.1A                                                                                                  |                    |           |                     |           |
|                                      | Resolution                                                                                                                 | 2.0% of setting + 2.0%F.S.                                                                            |                    |           |                     |           |
|                                      | Response Time                                                                                                              | <1400ms                                                                                               |                    |           |                     |           |
| Frequency                            | Range                                                                                                                      | 15~1000HZ Full Range Adjust                                                                           |                    |           |                     |           |
|                                      | Resolution                                                                                                                 | 0.1Hz at 15.0~99.9Hz, 1Hz at 100~1000Hz                                                               |                    |           |                     |           |
|                                      | Accuracy                                                                                                                   | 0.03% of setting                                                                                      |                    |           |                     |           |
| Voltage(DC)                          | Range                                                                                                                      | 0~424Vdc, 212V/424V/Auto                                                                              |                    |           |                     |           |
|                                      | Resolution                                                                                                                 | 0.1V                                                                                                  |                    |           |                     |           |
|                                      | Accuracy                                                                                                                   | 0.3% of setting + 0.8%F.S, at Voltage >3V                                                             |                    |           |                     |           |
| Max.Current(L/H Range)(Total)        | 0~150V(L)                                                                                                                  | L 17.568A                                                                                             |                    | L 26.352A |                     | L 35.136A |
|                                      | 0~300V(H)                                                                                                                  | H 8.784A                                                                                              |                    | H 13.176A |                     | H 17.568A |
| Ripple & Noise(r.m.s)                | L <1000mVrms @ Bandwidth 20HZ to 1MHZ                                                                                      |                                                                                                       |                    |           |                     |           |
|                                      | H <1500mVrms @ Bandwidth 20HZ to 1MHZ                                                                                      |                                                                                                       |                    |           |                     |           |
| Ripple & Noise(Peak)                 | <4000mVp-p @ Bandwidth 20HZ to 1MHZ                                                                                        |                                                                                                       |                    |           |                     |           |
| <b>Other Parameters</b>              |                                                                                                                            |                                                                                                       |                    |           |                     |           |
| Total Harmonic Distortion(THD)       | <0.5% (Resistive Load) at 15.0~70.0Hz and output voltage within the 80~140VAC at Low Range or the 160~280VAC at High Range |                                                                                                       |                    |           |                     |           |
|                                      | <1% (Resistive Load) at 70.1~500Hz and output voltage within the 80~140VAC at Low Range or the 160~280VAC at High Range    |                                                                                                       |                    |           |                     |           |
|                                      | <1.5% (Resistive Load) at 501~1000Hz and output voltage within the 80~140VAC at Low Range or the 160~280VAC at High Range  |                                                                                                       |                    |           |                     |           |
| Crest Factor(CF)                     | ≤6                                                                                                                         |                                                                                                       |                    |           |                     |           |
| Load Regulation                      | ± 0.5%F.S. @ 15~100HZ (Resistive Load)                                                                                     |                                                                                                       |                    |           |                     |           |
|                                      | ± 0.8%F.S. @ Others Freq (Resistive Load)                                                                                  |                                                                                                       |                    |           |                     |           |
| Line Regulation                      | ± 0.1V                                                                                                                     |                                                                                                       |                    |           |                     |           |
| Programmable Output Impedance        | Not Support                                                                                                                |                                                                                                       |                    |           |                     |           |
| Harmonic & Interharmonics Simulation | Not Support                                                                                                                |                                                                                                       |                    |           |                     |           |
| <b>Measurent(Master)</b>             |                                                                                                                            |                                                                                                       |                    |           |                     |           |
| Voltage                              | Range                                                                                                                      | AC 0~300VAC<br>DC 0~424VDC                                                                            |                    |           |                     |           |
|                                      | Resolution                                                                                                                 | 0.1V                                                                                                  |                    |           |                     |           |
|                                      | Accuracy                                                                                                                   | AC 0.2% of setting + 0.4%F.S. (Notes: Vpeak: 0.6% of setting+1%F.S.)<br>DC 0.3% of setting + 0.4%F.S. |                    |           |                     |           |
| Frequency                            | Range                                                                                                                      | 15~1000HZ                                                                                             |                    |           |                     |           |
|                                      | Resolution                                                                                                                 | 0.1Hz(15.0~99.9Hz), 1Hz(100~1000Hz)                                                                   |                    |           |                     |           |
|                                      | Accuracy                                                                                                                   | 0.1% of setting                                                                                       |                    |           |                     |           |
| Current(r.m.s)                       | Range                                                                                                                      | H 0.15A~ 13.8A                                                                                        |                    |           |                     |           |
|                                      |                                                                                                                            | M -                                                                                                   |                    |           |                     |           |
|                                      |                                                                                                                            | L 0.1A ~ 3A                                                                                           |                    |           |                     |           |
|                                      | mA -                                                                                                                       |                                                                                                       |                    |           |                     |           |
|                                      | Resolution                                                                                                                 | 0.01A                                                                                                 |                    |           |                     |           |
| Accuracy                             | 0.4%+1.0%F.S                                                                                                               |                                                                                                       |                    |           |                     |           |

# SPS-300 Series AC Power Supply System

| MODEL                                 |                      | SPS300VAC3000W-2-9                                                               | SPS300VAC4500W-2-9      | SPS300VAC6000W-2-17   |                |
|---------------------------------------|----------------------|----------------------------------------------------------------------------------|-------------------------|-----------------------|----------------|
| Current(Peak)                         | Range                | 0A~82.8A                                                                         |                         |                       |                |
|                                       | Resolution           | 0.01A                                                                            |                         |                       |                |
|                                       | Accuracy             | 0.4%+1.5%F.S.                                                                    |                         |                       |                |
| Power                                 | Range                | 0~1500W                                                                          |                         |                       |                |
|                                       | Resolution           | 0.1W                                                                             |                         |                       |                |
|                                       | Accuracy             | 0.4% of setting +1%F.S. at PF>0.2, Voltage >5V                                   |                         |                       |                |
| Power Apparent (VA)                   | Range                | 0~1530VA                                                                         |                         |                       |                |
|                                       | Resolution           | 0.1VA                                                                            |                         |                       |                |
|                                       | Accuracy             | Voltage * Irms, Calculated value                                                 |                         |                       |                |
| Power Resistive (VAR)                 | Range                | 0~1530VAR                                                                        |                         |                       |                |
|                                       | Resolution           | 0.1VAR                                                                           |                         |                       |                |
|                                       | Accuracy             | $\sqrt{(VA)^2 - (W)^2}$ , Calculated value                                       |                         |                       |                |
| Power Factor (PF)                     | Range                | 0.00~1.00                                                                        |                         |                       |                |
|                                       | Resolution           | 0.01                                                                             |                         |                       |                |
|                                       | Accuracy             | W/VA, Calculated value                                                           |                         |                       |                |
| Harmonic                              |                      | Not Support                                                                      |                         |                       |                |
| Σ Current                             | Range <sup>[1]</sup> | H                                                                                | 0.15A~24.84A            | H 0.15A~37.26A        | H 0.15A~49.68A |
|                                       |                      | M                                                                                |                         |                       |                |
|                                       |                      | L                                                                                | 0.1A~5.4A               | L 0.1A~8.1A           | L 0.1A~10.8A   |
|                                       | Resolution           | 0.01A                                                                            |                         |                       |                |
|                                       | Accuracy             | 0.4%+1.0%F.S.                                                                    |                         |                       |                |
| Σ Current                             | Range <sup>[1]</sup> | 0~2700W                                                                          | 0~4050W                 | 0~5400W               |                |
|                                       | Resolution           | 0.1W                                                                             |                         |                       |                |
|                                       | Accuracy             | 0.4% of setting +0.3%F.S at PF >0.2, Voltage > 5V                                |                         |                       |                |
| <b>Extra Function</b>                 |                      |                                                                                  |                         |                       |                |
| Remote Sense                          | Range                | 5V(rms), Max. Total power less than rated power                                  |                         |                       |                |
| Slew Rate                             | Range                | AC Voltage 0.001~1200.000V/ms and Disable                                        |                         |                       |                |
|                                       |                      | DC Voltage 0.001~1000.000V/ms and Disable                                        |                         |                       |                |
|                                       |                      | Frequency 0.001~1600.000HZ/ms and Disable                                        |                         |                       |                |
| Transient Generator(only for 15-70HZ) | Range                | Trans-Start : 0.0~66.5ms@15Hz , Resolution : 0.1ms                               |                         |                       |                |
|                                       |                      | Trans-Volt : -212V~+212V(L), -424V~+424V(H), Resolution : 0.1V                   |                         |                       |                |
|                                       |                      | Trans-Time : 0.0~66.5ms@15Hz , Resolution : 0.1ms                                |                         |                       |                |
|                                       |                      | Trans-Cycle : 0~9999, Constant                                                   |                         |                       |                |
| Calibration <sup>[2]</sup>            |                      | Firmware-based calibration through the digital interface or front panel          |                         |                       |                |
| Graphic Display                       |                      | 4.3" Color touch LCD                                                             |                         |                       |                |
| Operation Key Feature                 |                      | Soft key, Numeric key, Rotary Knob, USB port for transfer and upgrading firmware |                         |                       |                |
| Rack mount Handles                    |                      | Yes                                                                              |                         |                       |                |
| FAN                                   |                      | Temperature Control                                                              |                         |                       |                |
| Protection Circuits                   |                      | OCP, OVP, OPP, OTP, RCP, PRI_UVP, PRI_OVP, PRI_OTP, PRI_OCP, USB_OCP             |                         |                       |                |
| Interface                             |                      | Standard USB, RS-485, RS-232, GPIB & LAN is Optional                             |                         |                       |                |
| <b>Environment</b>                    |                      |                                                                                  |                         |                       |                |
| Operating Temperature                 |                      | 0°C~40°C                                                                         |                         |                       |                |
| Storage Temperature                   |                      | -40°C~85°C                                                                       |                         |                       |                |
| Fan Noise                             |                      | 55dB Min; 76dB Max.                                                              | 56.8dB Min; 77.8dB Max. | 58dB Min; 79dB Max.   |                |
| Altitude                              |                      | 2000m                                                                            |                         |                       |                |
| Relative Humidity                     |                      | 5%~95%, non-condensing                                                           |                         |                       |                |
| Temperature Coefficient               |                      | 100ppm/°C at Voltage, 300ppm/°C at Current, 100ppm/°C at Frequency               |                         |                       |                |
| <b>Mechanical</b>                     |                      |                                                                                  |                         |                       |                |
| Dimensions(WxHxD)                     |                      | 540.0x400.0x640.0 mm                                                             | 540.0x400.0x640.0 mm    | 560.0x754.0x700.0 mm  |                |
| Package Dimensions(W x H x D)         |                      | 660.0x710.0x760.0 mm                                                             | 660.0x710.0x760.0 mm    | 680.0x1120.0x860.0 mm |                |
| Unit Weight                           |                      | 72.8kg                                                                           | 88.7kg                  | 133.6kg               |                |
| Shipping Weight                       |                      | 89.7kg                                                                           | 108.7kg                 | 172.0kg               |                |
| <b>Regulatory Compliance</b>          |                      |                                                                                  |                         |                       |                |
| CE Mark                               |                      | Installation Overvoltage Category II; Class II equipment; indoor use only.       |                         |                       |                |

[1] In parallel mode, the amount needed to be reduced to 90 %

[2] Calibration function only available for single unit.

All specifications are subject to change without notice.

# SPS-300 Series AC Power Supply System

| MODEL                                |                                                                                                                            | SPS300VAC4000W-3-17                                                                                   |  | SPS300VAC6000W-3-17 |  | SPS300VAC8000W-3-17 |  |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|--|---------------------|--|---------------------|--|
| <b>Input</b>                         |                                                                                                                            |                                                                                                       |  |                     |  |                     |  |
| Voltage                              |                                                                                                                            | 190~265VAC                                                                                            |  |                     |  |                     |  |
| Frequency                            |                                                                                                                            | 47~63Hz                                                                                               |  |                     |  |                     |  |
| Phase                                |                                                                                                                            | 3 Phase, 4Wire+Groud/Y Connect                                                                        |  |                     |  |                     |  |
| Max.Current                          |                                                                                                                            | 28A                                                                                                   |  | 42A                 |  | 56A                 |  |
| Power Factor at 220VAC Input, Full   |                                                                                                                            | ≥0.99, Active PFC                                                                                     |  |                     |  |                     |  |
| Efficiency                           |                                                                                                                            | >87% (Peak)<br>>86% at 220VAC, 50Hz input/230VAC, 50Hz output)                                        |  |                     |  |                     |  |
| <b>Output</b>                        |                                                                                                                            |                                                                                                       |  |                     |  |                     |  |
| AC Power(Total) <sup>(1)</sup>       |                                                                                                                            | 3600VA                                                                                                |  | 5400VA              |  | 7200VA              |  |
| Max.Current (r.m.s) <sup>(1)</sup>   | 0~150V(L)                                                                                                                  | 28.8A                                                                                                 |  | 43.2A               |  | 57.6A               |  |
|                                      | 0~300V(H)                                                                                                                  | 14.4A                                                                                                 |  | 21.6A               |  | 28.8A               |  |
| Max.Current (Peak) <sup>(1)</sup>    | 0~150V(L)                                                                                                                  | 144A                                                                                                  |  | 216A                |  | 288A                |  |
|                                      | 0~300V(H)                                                                                                                  | 72A                                                                                                   |  | 108A                |  | 144A                |  |
| Voltage(AC)                          | Range                                                                                                                      | 0~300VAC, 150V/300V/Auto                                                                              |  |                     |  |                     |  |
|                                      | Resolution                                                                                                                 | 0.1V                                                                                                  |  |                     |  |                     |  |
|                                      | Accuracy                                                                                                                   | 0.2% of setting + 0.8%F.S., at Voltage >3V                                                            |  |                     |  |                     |  |
| Phase Angle (Starting /Ending)       | Range                                                                                                                      | 0~359.9°                                                                                              |  |                     |  |                     |  |
|                                      | Resolution                                                                                                                 | 0.1°                                                                                                  |  |                     |  |                     |  |
|                                      | Accuracy                                                                                                                   | ±1° @45~65HZ                                                                                          |  |                     |  |                     |  |
| Current OC Fold Mode                 | Range                                                                                                                      | 0.1A                                                                                                  |  |                     |  |                     |  |
|                                      | Resolution                                                                                                                 | 2.0% of setting + 2.0%F.S.                                                                            |  |                     |  |                     |  |
|                                      | Response Time                                                                                                              | <1400ms                                                                                               |  |                     |  |                     |  |
| Frequency                            | Range                                                                                                                      | 15~1000HZ Full Range Adjust                                                                           |  |                     |  |                     |  |
|                                      | Resolution                                                                                                                 | 0.1Hz at 15.0~99.9Hz, 1Hz at 100~1000Hz                                                               |  |                     |  |                     |  |
|                                      | Accuracy                                                                                                                   | 0.03% of setting                                                                                      |  |                     |  |                     |  |
| Voltage(DC)                          | Range                                                                                                                      | 0~424Vdc, 212V/424V/Auto                                                                              |  |                     |  |                     |  |
|                                      | Resolution                                                                                                                 | 0.1V                                                                                                  |  |                     |  |                     |  |
|                                      | Accuracy                                                                                                                   | 0.3% of setting + 0.8%F.S., at Voltage >3V                                                            |  |                     |  |                     |  |
| Max.Current(L/H Range)(Total)        | 0~150V(L)                                                                                                                  | L 20.34A                                                                                              |  | L 30.51A            |  | L 40.68A            |  |
|                                      | 0~300V(H)                                                                                                                  | H 10.17A                                                                                              |  | H 15.255A           |  | H 20.34A            |  |
| Ripple & Noise(r.m.s)                | L <1000mVrms @ Bandwidth 20HZ to 1MHZ                                                                                      |                                                                                                       |  |                     |  |                     |  |
|                                      | H <1500mVrms @ Bandwidth 20HZ to 1MHZ                                                                                      |                                                                                                       |  |                     |  |                     |  |
| Ripple & Noise(Peak)                 | <4000mVp-p @ Bandwidth 20HZ to 1MHZ                                                                                        |                                                                                                       |  |                     |  |                     |  |
| <b>Other Parameters</b>              |                                                                                                                            |                                                                                                       |  |                     |  |                     |  |
| Total Harmonic Distortion(THD)       | <0.5% (Resistive Load) at 15.0~70.0Hz and output voltage within the 80~140VAC at Low Range or the 160~280VAC at High Range |                                                                                                       |  |                     |  |                     |  |
|                                      | <1% (Resistive Load) at 70.1~500Hz and output voltage within the 80~140VAC at Low Range or the 160~280VAC at High Range    |                                                                                                       |  |                     |  |                     |  |
|                                      | <1.5% (Resistive Load) at 501~1000Hz and output voltage within the 80~140VAC at Low Range or the 160~280VAC at High Range  |                                                                                                       |  |                     |  |                     |  |
| Crest Factor(CF)                     | ≤5                                                                                                                         |                                                                                                       |  |                     |  |                     |  |
| Load Regulation                      | ± 0.5%F.S. @ 15~100HZ (Resistive Load)                                                                                     |                                                                                                       |  |                     |  |                     |  |
|                                      | ± 0.8%F.S. @ Others Freq (Resistive Load)                                                                                  |                                                                                                       |  |                     |  |                     |  |
| Line Regulation                      | ± 0.1V                                                                                                                     |                                                                                                       |  |                     |  |                     |  |
| Programmable Output Impedance        | Not Support                                                                                                                |                                                                                                       |  |                     |  |                     |  |
| Harmonic & Interharmonics Simulation | Not Support                                                                                                                |                                                                                                       |  |                     |  |                     |  |
| <b>Measurent(Master)</b>             |                                                                                                                            |                                                                                                       |  |                     |  |                     |  |
| Voltage                              | Range                                                                                                                      | AC 0~300VAC<br>DC 0~424VDC                                                                            |  |                     |  |                     |  |
|                                      | Resolution                                                                                                                 | 0.1V                                                                                                  |  |                     |  |                     |  |
|                                      | Accuracy                                                                                                                   | AC 0.2% of setting + 0.4%F.S. (Notes: Vpeak: 0.6% of setting+1%F.S.)<br>DC 0.3% of setting + 0.4%F.S. |  |                     |  |                     |  |
| Frequency                            | Range                                                                                                                      | 15~1000HZ                                                                                             |  |                     |  |                     |  |
|                                      | Resolution                                                                                                                 | 0.1Hz(15.0~99.9Hz), 1Hz(100~1000Hz)                                                                   |  |                     |  |                     |  |
|                                      | Accuracy                                                                                                                   | 0.1% of setting                                                                                       |  |                     |  |                     |  |
| Current(r.m.s)                       | Range                                                                                                                      | H 0.15A~20A                                                                                           |  |                     |  |                     |  |
|                                      |                                                                                                                            | M -                                                                                                   |  |                     |  |                     |  |
|                                      |                                                                                                                            | L 0.1A~5A                                                                                             |  |                     |  |                     |  |
|                                      |                                                                                                                            | mA 0.02~1.5A                                                                                          |  |                     |  |                     |  |
|                                      | Resolution                                                                                                                 | 0.01A                                                                                                 |  |                     |  |                     |  |
| Accuracy                             | 0.4%+1.0%F.S                                                                                                               |                                                                                                       |  |                     |  |                     |  |

# SPS-300 Series AC Power Supply System

| MODEL                                 |                      | SPS300VAC4000W-3-17                                                              | SPS300VAC6000W-3-17     | SPS300VAC8000W-3-17   |
|---------------------------------------|----------------------|----------------------------------------------------------------------------------|-------------------------|-----------------------|
| Current(Peak)                         | Range                | 0A~81.5A                                                                         |                         |                       |
|                                       | Resolution           | 0.01A                                                                            |                         |                       |
|                                       | Accuracy             | 0.4%+1.5%F.S.                                                                    |                         |                       |
| Power                                 | Range                | 0~2040W                                                                          |                         |                       |
|                                       | Resolution           | 0.1W                                                                             |                         |                       |
|                                       | Accuracy             | 0.4% of setting +1%F.S. at PF>0.2, Voltage >5V                                   |                         |                       |
| Power Apparent (VA)                   | Range                | 0~2040VA                                                                         |                         |                       |
|                                       | Resolution           | 0.1VA                                                                            |                         |                       |
|                                       | Accuracy             | Voltage * I <sub>rms</sub> , Calculated value                                    |                         |                       |
| Power Resistive (VAR)                 | Range                | 0~2040VAR                                                                        |                         |                       |
|                                       | Resolution           | 0.1VAR                                                                           |                         |                       |
|                                       | Accuracy             | $\sqrt{(VA)^2 - (W)^2}$ , Calculated value                                       |                         |                       |
| Power Factor (PF)                     | Range                | 0.00~1.00                                                                        |                         |                       |
|                                       | Resolution           | 0.01                                                                             |                         |                       |
|                                       | Accuracy             | W/VA, Calculated value                                                           |                         |                       |
| Harmonic                              |                      | Not Support                                                                      |                         |                       |
| Σ Current                             | Range <sup>[1]</sup> | H 0.15A~28.8A                                                                    | H 0.15A~43.2A           | H 0.15A~57.6A         |
|                                       |                      | M -                                                                              |                         |                       |
|                                       |                      | L 0.1A~9A                                                                        | L 0.1A~13.5A            | L 0.1A~18A            |
|                                       |                      | mA 0.02~2.7A                                                                     | mA 0.02~4.05A           | mA 0.02~5.4A          |
|                                       | Resolution           | 0.01A                                                                            |                         |                       |
| Accuracy                              | 0.4%+1.0%F.S.        |                                                                                  |                         |                       |
| Σ Current                             | Range <sup>[1]</sup> | 0~3762W                                                                          | 0~5508W                 | 0~7344W               |
|                                       | Resolution           | 0.1W                                                                             |                         |                       |
|                                       | Accuracy             | 0.4% of setting +0.3%F.S at PF >0.2, Voltage > 5V                                |                         |                       |
| <b>Extra Function</b>                 |                      |                                                                                  |                         |                       |
| Remote Sense                          | Range                | 5V(rms), Max. Total power less than rated power                                  |                         |                       |
| Slew Rate                             | Range                | AC Voltage 0.001~1200.000V/ms and Disable                                        |                         |                       |
|                                       |                      | DC Voltage 0.001~1000.000V/ms and Disable                                        |                         |                       |
|                                       |                      | Frequency 0.001~1600.000HZ/ms and Disable                                        |                         |                       |
| Transient Generator(only for 15-70HZ) | Range                | Trans-Start : 0.0~66.5ms@15Hz , Resolution : 0.1ms                               |                         |                       |
|                                       |                      | Trans-Volt : -212V~+212V(L), -424V~+424V(H), Resolution : 0.1V                   |                         |                       |
|                                       |                      | Trans-Time : 0.0~66.5ms@15Hz , Resolution : 0.1ms                                |                         |                       |
|                                       |                      | Trans-Cycle : 0~9999, Constant                                                   |                         |                       |
| Calibration <sup>[2]</sup>            |                      | Firmware-based calibration through the digital interface or front panel          |                         |                       |
| Graphic Display                       |                      | 4.3" Color touch LCD                                                             |                         |                       |
| Operation Key Feature                 |                      | Soft key, Numeric key, Rotary Knob, USB port for transfer and upgrading firmware |                         |                       |
| Rack mount Handles                    |                      | Yes                                                                              |                         |                       |
| FAN                                   |                      | Temperature Control                                                              |                         |                       |
| Protection Circuits                   |                      | OCP, OVP, OPP, OTP, RCP, PRI_UVP, PRI_OVP, PRI_OTP, PRI_OCP, USB_OCP             |                         |                       |
| Interface                             |                      | Standard USB, RS-485, RS-232, LAN, GPIB is Optional                              |                         |                       |
| <b>Environment</b>                    |                      |                                                                                  |                         |                       |
| Operating Temperature                 |                      | 0°C~40°C                                                                         |                         |                       |
| Storage Temperature                   |                      | -40°C~85°C                                                                       |                         |                       |
| Fan Noise                             |                      | 55dB Min; 76dB Max.                                                              | 56.8dB Min; 77.8dB Max. | 58dB Min; 79dB Max.   |
| Altitude                              |                      | 2000m                                                                            |                         |                       |
| Relative Humidity                     |                      | 5%~95%, non-condensing                                                           |                         |                       |
| Temperature Coefficient               |                      | 100ppm/°C at Voltage, 300ppm/°C at Current, 100ppm/°C at Frequency               |                         |                       |
| <b>Mechanical</b>                     |                      |                                                                                  |                         |                       |
| Dimensions(WxHxD)                     |                      | 560.0x754.0x700.0 mm                                                             | 560.0x754.0x700.0 mm    | 560.0x754.0x700.0 mm  |
| Package Dimensions(W x H x D)         |                      | 680.0x1146.0x820.0 mm                                                            | 680.0x1146.0x820.0 mm   | 680.0x1120.0x860.0 mm |
| Unit Weight                           |                      | 112.6kg                                                                          | 134.0kg                 | 155.6kg               |
| Shipping Weight                       |                      | 148.6kg                                                                          | 173.0kg                 | 194.0kg               |
| <b>Regulatory Compliance</b>          |                      |                                                                                  |                         |                       |
| CE Mark                               |                      | Installation Overvoltage Category II; Class II equipment; indoor use only.       |                         |                       |

[1]In parallel mode, the amount needed to be reduced to 90 %

[2]Calibration function only available for single unit.

All specifications are subject to change without notice.

# SPS-300 Series AC Power Supply System

| MODEL                                |                                                                                                                            | SPS300VAC6000W-4-17                                                                                   |  | SPS300VAC9000W-4-17 |  | SPS300VAC12000W-4-21 |  |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|--|---------------------|--|----------------------|--|
| <b>Input</b>                         |                                                                                                                            |                                                                                                       |  |                     |  |                      |  |
| Voltage                              |                                                                                                                            | 190~265VAC                                                                                            |  |                     |  |                      |  |
| Frequency                            |                                                                                                                            | 47~63Hz                                                                                               |  |                     |  |                      |  |
| Phase                                |                                                                                                                            | 3 Phase, 4Wire+Groud/Y Connect                                                                        |  |                     |  |                      |  |
| Max.Current                          |                                                                                                                            | 40A                                                                                                   |  | 60A                 |  | 80A                  |  |
| Power Factor at 220VAC Input, Full   |                                                                                                                            | ≥0.98, Active PFC                                                                                     |  |                     |  |                      |  |
| Efficiency                           |                                                                                                                            | >86% (Peak)                                                                                           |  |                     |  |                      |  |
|                                      |                                                                                                                            | >85% at 220VAC, 50Hz input/230VAC, 50Hz output)                                                       |  |                     |  |                      |  |
| <b>Output</b>                        |                                                                                                                            |                                                                                                       |  |                     |  |                      |  |
| AC Power(Total) <sup>(1)</sup>       |                                                                                                                            | 5400VA                                                                                                |  | 8100VA              |  | 10800VA              |  |
| Max.Current (r.m.s) <sup>(1)</sup>   | 0~150V(L)                                                                                                                  | 49.68A                                                                                                |  | 74.52A              |  | 99.36A               |  |
|                                      | 0~300V(H)                                                                                                                  | 24.84A                                                                                                |  | 37.26A              |  | 49.68A               |  |
| Max.Current (Peak) <sup>(1)</sup>    | 0~150V(L)                                                                                                                  | 298.08A                                                                                               |  | 447.12A             |  | 596.16A              |  |
|                                      | 0~300V(H)                                                                                                                  | 149.04A                                                                                               |  | 223.56A             |  | 298.08A              |  |
| Voltage(AC)                          | Range                                                                                                                      | 0~300VAC, 150V/300V/Auto                                                                              |  |                     |  |                      |  |
|                                      | Resolution                                                                                                                 | 0.1V                                                                                                  |  |                     |  |                      |  |
|                                      | Accuracy                                                                                                                   | 0.2% of setting + 0.8%F.S., at Voltage >3V                                                            |  |                     |  |                      |  |
| Phase Angle (Starting /Ending)       | Range                                                                                                                      | 0~359.9°                                                                                              |  |                     |  |                      |  |
|                                      | Resolution                                                                                                                 | 0.1°                                                                                                  |  |                     |  |                      |  |
|                                      | Accuracy                                                                                                                   | ±1° @45~65HZ                                                                                          |  |                     |  |                      |  |
| Current OC Fold Mode                 | Range                                                                                                                      | 0.1A                                                                                                  |  |                     |  |                      |  |
|                                      | Resolution                                                                                                                 | 2.0% of setting + 2.0%F.S.                                                                            |  |                     |  |                      |  |
|                                      | Response Time                                                                                                              | <1400ms                                                                                               |  |                     |  |                      |  |
| Frequency                            | Range                                                                                                                      | 15~1000HZ Full Range Adjust                                                                           |  |                     |  |                      |  |
|                                      | Resolution                                                                                                                 | 0.1Hz at 15.0~99.9Hz, 1Hz at 100~1000Hz                                                               |  |                     |  |                      |  |
|                                      | Accuracy                                                                                                                   | 0.03% of setting                                                                                      |  |                     |  |                      |  |
| Voltage(DC)                          | Range                                                                                                                      | 0~424Vdc, 212V/424V/Auto                                                                              |  |                     |  |                      |  |
|                                      | Resolution                                                                                                                 | 0.1V                                                                                                  |  |                     |  |                      |  |
|                                      | Accuracy                                                                                                                   | 0.3% of setting + 0.8%F.S., at Voltage >3V                                                            |  |                     |  |                      |  |
| Max.Current(L/H Range)(Total)        | 0~150V(L)                                                                                                                  | L 35.28A                                                                                              |  | L 52.92A            |  | L 70.56A             |  |
|                                      | 0~300V(H)                                                                                                                  | H 17.64A                                                                                              |  | H 26.46A            |  | H 35.28A             |  |
| Ripple & Noise(r.m.s)                | L <1000mVrms @ Bandwidth 20HZ to 1MHZ                                                                                      |                                                                                                       |  |                     |  |                      |  |
|                                      | H <1500mVrms @ Bandwidth 20HZ to 1MHZ                                                                                      |                                                                                                       |  |                     |  |                      |  |
| Ripple & Noise(Peak)                 | <4000mVp-p @ Bandwidth 20HZ to 1MHZ                                                                                        |                                                                                                       |  |                     |  |                      |  |
| <b>Other Parameters</b>              |                                                                                                                            |                                                                                                       |  |                     |  |                      |  |
| Total Harmonic Distortion(THD)       | <0.5% (Resistive Load) at 15.0~70.0Hz and output voltage within the 80~140VAC at Low Range or the 160~280VAC at High Range |                                                                                                       |  |                     |  |                      |  |
|                                      | <1% (Resistive Load) at 70.1~500Hz and output voltage within the 80~140VAC at Low Range or the 160~280VAC at High Range    |                                                                                                       |  |                     |  |                      |  |
|                                      | <1.5% (Resistive Load) at 501~1000Hz and output voltage within the 80~140VAC at Low Range or the 160~280VAC at High Range  |                                                                                                       |  |                     |  |                      |  |
| Crest Factor(CF)                     | ≤6                                                                                                                         |                                                                                                       |  |                     |  |                      |  |
| Load Regulation                      | ± 0.5%F.S. @ 15~100HZ (Resistive Load)                                                                                     |                                                                                                       |  |                     |  |                      |  |
|                                      | ± 0.8%F.S. @ Others Freq (Resistive Load)                                                                                  |                                                                                                       |  |                     |  |                      |  |
| Line Regulation                      | ± 0.1V                                                                                                                     |                                                                                                       |  |                     |  |                      |  |
| Programmable Output Impedance        | Not Support                                                                                                                |                                                                                                       |  |                     |  |                      |  |
| Harmonic & Interharmonics Simulation | Not Support                                                                                                                |                                                                                                       |  |                     |  |                      |  |
| <b>Measurent(Master)</b>             |                                                                                                                            |                                                                                                       |  |                     |  |                      |  |
| Voltage                              | Range                                                                                                                      | AC 0~300VAC<br>DC 0~424VDC                                                                            |  |                     |  |                      |  |
|                                      | Resolution                                                                                                                 | 0.1V                                                                                                  |  |                     |  |                      |  |
|                                      | Accuracy                                                                                                                   | AC 0.2% of setting + 0.4%F.S. (Notes: Vpeak: 0.6% of setting+1%F.S.)<br>DC 0.3% of setting + 0.4%F.S. |  |                     |  |                      |  |
| Frequency                            | Range                                                                                                                      | 15~1000HZ                                                                                             |  |                     |  |                      |  |
|                                      | Resolution                                                                                                                 | 0.1Hz(15.0~99.9Hz), 1Hz(100~1000Hz)                                                                   |  |                     |  |                      |  |
|                                      | Accuracy                                                                                                                   | 0.1% of setting                                                                                       |  |                     |  |                      |  |
| Current(r.m.s)                       | Range                                                                                                                      | H 0.3A~27.6A                                                                                          |  |                     |  |                      |  |
|                                      |                                                                                                                            | M 0.2A~20A                                                                                            |  |                     |  |                      |  |
|                                      |                                                                                                                            | L 0.1A~5A                                                                                             |  |                     |  |                      |  |
|                                      |                                                                                                                            | mA 0.02~1.5A                                                                                          |  |                     |  |                      |  |
|                                      | Resolution                                                                                                                 | 0.01A                                                                                                 |  |                     |  |                      |  |
| Accuracy                             | 0.4%+1.0%F.S                                                                                                               |                                                                                                       |  |                     |  |                      |  |



# SPS-300 Series AC Power Supply System

| MODEL                                 |                                                                         | SPS300VAC6000W-4-17                                                              | SPS300VAC9000W-4-17     | SPS300VAC12000W-4-21  |               |
|---------------------------------------|-------------------------------------------------------------------------|----------------------------------------------------------------------------------|-------------------------|-----------------------|---------------|
| Current(Peak)                         | Range                                                                   | 0A~168.6A                                                                        |                         |                       |               |
|                                       | Resolution                                                              | 0.01A                                                                            |                         |                       |               |
|                                       | Accuracy                                                                | 0.4%+1.5%F.S.                                                                    |                         |                       |               |
| Power                                 | Range                                                                   | 0~3060W                                                                          |                         |                       |               |
|                                       | Resolution                                                              | 0.1W                                                                             |                         |                       |               |
|                                       | Accuracy                                                                | 0.4% of setting +1%F.S. at PF>0.2, Voltage >5V                                   |                         |                       |               |
| Power Apparent (VA)                   | Range                                                                   | 0~3060VA                                                                         |                         |                       |               |
|                                       | Resolution                                                              | 0.1VA                                                                            |                         |                       |               |
|                                       | Accuracy                                                                | Voltage * Irms, Calculated value                                                 |                         |                       |               |
| Power Resistive (VAR)                 | Range                                                                   | 0~3060VAR                                                                        |                         |                       |               |
|                                       | Resolution                                                              | 0.1VAR                                                                           |                         |                       |               |
|                                       | Accuracy                                                                | $\sqrt{(VA)^2 - (W)^2}$ , Calculated value                                       |                         |                       |               |
| Power Factor (PF)                     | Range                                                                   | 0.00~1.00                                                                        |                         |                       |               |
|                                       | Resolution                                                              | 0.01                                                                             |                         |                       |               |
|                                       | Accuracy                                                                | W/VA, Calculated value                                                           |                         |                       |               |
| Harmonic                              |                                                                         | Not Support                                                                      |                         |                       |               |
| Σ Current                             | Range <sup>[1]</sup>                                                    | H                                                                                | 0.3A~49.68A             | H 0.3A~74.52A         | H 0.3A~99.36A |
|                                       |                                                                         | M                                                                                | 0.2A~36A                | M 0.2A~54A            | M 0.2A~72A    |
|                                       |                                                                         | L                                                                                | 0.1A~9A                 | L 0.1A~13.5A          | L 0.1A~18A    |
|                                       |                                                                         | mA                                                                               | 0.02~2.7A               | mA 0.02~4.05A         | mA 0.02~5.4A  |
|                                       | Resolution                                                              | 0.01A                                                                            |                         |                       |               |
| Accuracy                              | 0.4%+1.0%F.S.                                                           |                                                                                  |                         |                       |               |
| Σ Current                             | Range <sup>[1]</sup>                                                    | 0~5508W                                                                          | 0~8262W                 | 0~11016W              |               |
|                                       | Resolution                                                              | 0.1W                                                                             |                         |                       |               |
|                                       | Accuracy                                                                | 0.4% of setting +0.3%F.S at PF >0.2, Voltage > 5V                                |                         |                       |               |
| <b>Extra Function</b>                 |                                                                         |                                                                                  |                         |                       |               |
| Remote Sense                          | Range                                                                   | 5V(rms), Max. Total power less than rated power                                  |                         |                       |               |
| Slew Rate                             | Range                                                                   | AC Voltage 0.001~1200.000V/ms and Disable                                        |                         |                       |               |
|                                       |                                                                         | DC Voltage 0.001~1000.000V/ms and Disable                                        |                         |                       |               |
|                                       |                                                                         | Frequency 0.001~1600.000HZ/ms and Disable                                        |                         |                       |               |
| Transient Generator(only for 15-70HZ) | Range                                                                   | Trans-Start : 0.0~66.5ms@15Hz , Resolution : 0.1ms                               |                         |                       |               |
|                                       |                                                                         | Trans-Volt : -212V~+212V(L), -424V~+424V(H), Resolution : 0.1V                   |                         |                       |               |
|                                       |                                                                         | Trans-Time : 0.0~66.5ms@15Hz , Resolution : 0.1ms                                |                         |                       |               |
|                                       |                                                                         | Trans-Cycle : 0~9999, Constant                                                   |                         |                       |               |
| Calibration <sup>[2]</sup>            | Firmware-based calibration through the digital interface or front panel |                                                                                  |                         |                       |               |
| Graphic Display                       |                                                                         | 4.3" Color touch LCD                                                             |                         |                       |               |
| Operation Key Feature                 |                                                                         | Soft key, Numeric key, Rotary Knob, USB port for transfer and upgrading firmware |                         |                       |               |
| Rack mount Handles                    |                                                                         | Yes                                                                              |                         |                       |               |
| FAN                                   |                                                                         | Temperature Control                                                              |                         |                       |               |
| Protection Circuits                   |                                                                         | OCP, OVP, OPP, OTP, RCP, PRI_UVP, PRI_OVP, PRI_OTP, PRI_OCP, USB_OCP             |                         |                       |               |
| Interface                             |                                                                         | Standard USB, RS-485, RS-232, LAN, GPIB is Optional                              |                         |                       |               |
| <b>Environment</b>                    |                                                                         |                                                                                  |                         |                       |               |
| Operating Temperature                 |                                                                         | 0°C~40°C                                                                         |                         |                       |               |
| Storage Temperature                   |                                                                         | -40°C~85°C                                                                       |                         |                       |               |
| Fan Noise                             |                                                                         | 55dB Min; 76dB Max.                                                              | 56.8dB Min; 77.8dB Max. | 58dB Min; 79dB Max.   |               |
| Altitude                              |                                                                         | 2000m                                                                            |                         |                       |               |
| Relative Humidity                     |                                                                         | 5%~95%, non-condensing                                                           |                         |                       |               |
| Temperature Coefficient               |                                                                         | 100ppm/°C at Voltage, 300ppm/°C at Current, 100ppm/°C at Frequency               |                         |                       |               |
| <b>Mechanical</b>                     |                                                                         |                                                                                  |                         |                       |               |
| Dimensions(WxHxD)                     |                                                                         | 560.0x754.0x700.0 mm                                                             | 560.0x754.0x700.0 mm    | 560.0x932.0x700.0 mm  |               |
| Package Dimensions(W x H x D)         |                                                                         | 680.0x1146.0x820.0 mm                                                            | 680.0x1146.0x820.0 mm   | 680.0x1297.0x820.0 mm |               |
| Unit Weight                           |                                                                         | 128.0kg                                                                          | 157.0kg                 | 224kg                 |               |
| Shipping Weight                       |                                                                         | 163.0kg                                                                          | 195.0kg                 | 265kg                 |               |
| <b>Regulatory Compliance</b>          |                                                                         |                                                                                  |                         |                       |               |
| CE Mark                               |                                                                         | Installation Overvoltage Category II; Class II equipment; indoor use only.       |                         |                       |               |

[1]In parallel mode, the amount needed to be reduced to 90 %

[2]Calibration function only available for single unit.

All specifications are subject to change without notice.

# SPS-300 Series AC Power Supply System

| MODEL                                | SPS300VAC8000W-4-17                                                                                                        |                                                                                                       | SPS300VAC12000W-4-17 |  | SPS300VAC16000W-4-21 |  |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|----------------------|--|----------------------|--|
| <b>Input</b>                         |                                                                                                                            |                                                                                                       |                      |  |                      |  |
| Voltage                              | 190~265VAC                                                                                                                 |                                                                                                       |                      |  |                      |  |
| Frequency                            | 47~63Hz                                                                                                                    |                                                                                                       |                      |  |                      |  |
| Phase                                | 3 Phase, 4Wire+Groud/Y Connect                                                                                             |                                                                                                       |                      |  |                      |  |
| Max.Current                          | 50A                                                                                                                        |                                                                                                       | 70A                  |  | 100A                 |  |
| Power Factor at 220VAC Input, Full   | ≥0.99, Active PFC                                                                                                          |                                                                                                       |                      |  |                      |  |
| Efficiency                           | >87% (Peak)                                                                                                                |                                                                                                       |                      |  |                      |  |
|                                      | >86% at 220VAC, 50Hz input/230VAC, 50Hz output)                                                                            |                                                                                                       |                      |  |                      |  |
| <b>Output</b>                        |                                                                                                                            |                                                                                                       |                      |  |                      |  |
| AC Power(Total) <sup>(1)</sup>       | 7200VA                                                                                                                     |                                                                                                       | 10800VA              |  | 14400VA              |  |
| Max.Current (r.m.s) <sup>(1)</sup>   | 0~150V(L)                                                                                                                  | 57.6A                                                                                                 | 86.4A                |  | 115.2A               |  |
|                                      | 0~300V(H)                                                                                                                  | 28.8A                                                                                                 | 43.2A                |  | 57.6A                |  |
| Max.Current (Peak) <sup>(1)</sup>    | 0~150V(L)                                                                                                                  | 288A                                                                                                  | 432A                 |  | 576A                 |  |
|                                      | 0~300V(H)                                                                                                                  | 144A                                                                                                  | 216A                 |  | 288A                 |  |
| Voltage(AC)                          | Range                                                                                                                      | 0~300VAC, 150V/300V/Auto                                                                              |                      |  |                      |  |
|                                      | Resolution                                                                                                                 | 0.1V                                                                                                  |                      |  |                      |  |
|                                      | Accuracy                                                                                                                   | 0.2% of setting + 0.8%F.S., at Voltage >3V                                                            |                      |  |                      |  |
| Phase Angle (Starting /Ending)       | Range                                                                                                                      | 0~359.9°                                                                                              |                      |  |                      |  |
|                                      | Resolution                                                                                                                 | 0.1°                                                                                                  |                      |  |                      |  |
|                                      | Accuracy                                                                                                                   | ±1° @45~65HZ                                                                                          |                      |  |                      |  |
| Current OC Fold Mode                 | Range                                                                                                                      | 0.1A                                                                                                  |                      |  |                      |  |
|                                      | Resolution                                                                                                                 | 2.0% of setting + 2.0%F.S.                                                                            |                      |  |                      |  |
|                                      | Response Time                                                                                                              | <1400ms                                                                                               |                      |  |                      |  |
| Frequency                            | Range                                                                                                                      | 15~1000HZ Full Range Adjust                                                                           |                      |  |                      |  |
|                                      | Resolution                                                                                                                 | 0.1Hz at 15.0~99.9Hz, 1Hz at 100~1000Hz                                                               |                      |  |                      |  |
|                                      | Accuracy                                                                                                                   | 0.03% of setting                                                                                      |                      |  |                      |  |
| Voltage(DC)                          | Range                                                                                                                      | 0~424Vdc, 212V/424V/Auto                                                                              |                      |  |                      |  |
|                                      | Resolution                                                                                                                 | 0.1V                                                                                                  |                      |  |                      |  |
|                                      | Accuracy                                                                                                                   | 0.3% of setting + 0.8%F.S., at Voltage >3V                                                            |                      |  |                      |  |
| Max.Current(L/H Range)(Total)        | 0~150V(L)                                                                                                                  | L 40.68A                                                                                              | L 61.02A             |  | L 81.36A             |  |
|                                      | 0~300V(H)                                                                                                                  | H 20.34A                                                                                              | H 30.51A             |  | H 40.68A             |  |
| Ripple & Noise(r.m.s)                | L <1000mVrms @ Bandwidth 20HZ to 1MHZ                                                                                      |                                                                                                       |                      |  |                      |  |
|                                      | H <1500mVrms @ Bandwidth 20HZ to 1MHZ                                                                                      |                                                                                                       |                      |  |                      |  |
| Ripple & Noise(Peak)                 | <4000mVp-p @ Bandwidth 20HZ to 1MHZ                                                                                        |                                                                                                       |                      |  |                      |  |
| <b>Other Parameters</b>              |                                                                                                                            |                                                                                                       |                      |  |                      |  |
| Total Harmonic Distortion(THD)       | <0.5% (Resistive Load) at 15.0~70.0Hz and output voltage within the 80~140VAC at Low Range or the 160~280VAC at High Range |                                                                                                       |                      |  |                      |  |
|                                      | <1% (Resistive Load) at 70.1~500Hz and output voltage within the 80~140VAC at Low Range or the 160~280VAC at High Range    |                                                                                                       |                      |  |                      |  |
|                                      | <1.5% (Resistive Load) at 501~1000Hz and output voltage within the 80~140VAC at Low Range or the 160~280VAC at High Range  |                                                                                                       |                      |  |                      |  |
| Crest Factor(CF)                     | ≤5                                                                                                                         |                                                                                                       |                      |  |                      |  |
| Load Regulation                      | ± 0.5%F.S. @ 15~100HZ (Resistive Load)                                                                                     |                                                                                                       |                      |  |                      |  |
|                                      | ± 0.8%F.S. @ Others Freq (Resistive Load)                                                                                  |                                                                                                       |                      |  |                      |  |
| Line Regulation                      | ± 0.1V                                                                                                                     |                                                                                                       |                      |  |                      |  |
| Programmable Output Impedance        | Not Support                                                                                                                |                                                                                                       |                      |  |                      |  |
| Harmonic & Interharmonics Simulation | Not Support                                                                                                                |                                                                                                       |                      |  |                      |  |
| <b>Measurent(Master)</b>             |                                                                                                                            |                                                                                                       |                      |  |                      |  |
| Voltage                              | Range                                                                                                                      | AC 0~300VAC<br>DC 0~424VDC                                                                            |                      |  |                      |  |
|                                      | Resolution                                                                                                                 | 0.1V                                                                                                  |                      |  |                      |  |
|                                      | Accuracy                                                                                                                   | AC 0.2% of setting + 0.4%F.S. (Notes: Vpeak: 0.6% of setting+1%F.S.)<br>DC 0.3% of setting + 0.4%F.S. |                      |  |                      |  |
| Frequency                            | Range                                                                                                                      | 15~1000HZ                                                                                             |                      |  |                      |  |
|                                      | Resolution                                                                                                                 | 0.1Hz(15.0~99.9Hz), 1Hz(100~1000Hz)                                                                   |                      |  |                      |  |
|                                      | Accuracy                                                                                                                   | 0.1% of setting                                                                                       |                      |  |                      |  |
| Current(r.m.s)                       | Range                                                                                                                      | H 0.3A~32A                                                                                            |                      |  |                      |  |
|                                      |                                                                                                                            | M 0.2A~20A                                                                                            |                      |  |                      |  |
|                                      |                                                                                                                            | L 0.1A~5A                                                                                             |                      |  |                      |  |
|                                      |                                                                                                                            | mA 0.02~1.5A                                                                                          |                      |  |                      |  |
|                                      | Resolution                                                                                                                 | 0.01A                                                                                                 |                      |  |                      |  |
| Accuracy                             | 0.4%+1.0%F.S                                                                                                               |                                                                                                       |                      |  |                      |  |

# SPS-300 Series AC Power Supply System

| MODEL                                 |                                                                                  | SPS300VAC8000W-4-17                                            | SPS300VAC12000W-4-17  | SPS300VAC16000W-4-21 |
|---------------------------------------|----------------------------------------------------------------------------------|----------------------------------------------------------------|-----------------------|----------------------|
| Current(Peak)                         | Range                                                                            | 0.05A~163A                                                     |                       |                      |
|                                       | Resolution                                                                       | 0.01A                                                          |                       |                      |
|                                       | Accuracy                                                                         | 0.4%+1.5%F.S.                                                  |                       |                      |
| Power                                 | Range                                                                            | 0~4080W                                                        |                       |                      |
|                                       | Resolution                                                                       | 0.1W                                                           |                       |                      |
|                                       | Accuracy                                                                         | 0.4% of setting +1%F.S. at PF>0.2, Voltage >5V                 |                       |                      |
| Power Apparent (VA)                   | Range                                                                            | 0~4080VA                                                       |                       |                      |
|                                       | Resolution                                                                       | 0.1VA                                                          |                       |                      |
|                                       | Accuracy                                                                         | Voltage * I <sub>rms</sub> , Calculated value                  |                       |                      |
| Power Resistive (VAR)                 | Range                                                                            | 0~4080VAR                                                      |                       |                      |
|                                       | Resolution                                                                       | 0.1VAR                                                         |                       |                      |
|                                       | Accuracy                                                                         | $\sqrt{(VA)^2 - (W)^2}$ , Calculated value                     |                       |                      |
| Power Factor (PF)                     | Range                                                                            | 0.00~1.00                                                      |                       |                      |
|                                       | Resolution                                                                       | 0.01                                                           |                       |                      |
|                                       | Accuracy                                                                         | W/VA, Calculated value                                         |                       |                      |
| Harmonic                              | Not Support                                                                      |                                                                |                       |                      |
| Σ Current                             | Range <sup>[1]</sup>                                                             | H 0.3A~57.6A                                                   | H 0.3A~86.4A          | H 0.3A~115.2A        |
|                                       |                                                                                  | M 0.2A~36A                                                     | M 0.2A~54A            | M 0.2A~72A           |
|                                       |                                                                                  | L 0.1A~9A                                                      | L 0.1A~13.5A          | L 0.1A~18A           |
|                                       |                                                                                  | mA 0.02~2.7A                                                   | mA 0.02~4.05A         | mA 0.02~5.4A         |
|                                       | Resolution                                                                       | 0.01A                                                          |                       |                      |
| Accuracy                              | 0.4%+1.0%F.S.                                                                    |                                                                |                       |                      |
| Σ Current                             | Range <sup>[1]</sup>                                                             | 0~7344W                                                        | 0~11016W              | 0~14688W             |
|                                       | Resolution                                                                       | 0.1W                                                           |                       |                      |
|                                       | Accuracy                                                                         | 0.4% of setting +0.3%F.S at PF >0.2, Voltage > 5V              |                       |                      |
| <b>Extra Function</b>                 |                                                                                  |                                                                |                       |                      |
| Remote Sense                          | Range                                                                            | 5V(rms), Max. Total power less than rated power                |                       |                      |
| Slew Rate                             | Range                                                                            | AC Voltage 0.001~1200.000V/ms and Disable                      |                       |                      |
|                                       |                                                                                  | DC Voltage 0.001~1000.000V/ms and Disable                      |                       |                      |
|                                       |                                                                                  | Frequency 0.001~1600.000HZ/ms and Disable                      |                       |                      |
| Transient Generator(only for 15-70HZ) | Range                                                                            | Trans-Start : 0.0~66.5ms@15Hz , Resolution : 0.1ms             |                       |                      |
|                                       |                                                                                  | Trans-Volt : -212V~+212V(L), -424V~+424V(H), Resolution : 0.1V |                       |                      |
|                                       |                                                                                  | Trans-Time : 0.0~66.5ms@15Hz , Resolution : 0.1ms              |                       |                      |
|                                       |                                                                                  | Trans-Cycle : 0~9999, Constant                                 |                       |                      |
| Calibration <sup>[2]</sup>            | Firmware-based calibration through the digital interface or front panel          |                                                                |                       |                      |
| Graphic Display                       | 4.3" Color touch LCD                                                             |                                                                |                       |                      |
| Operation Key Feature                 | Soft key, Numeric key, Rotary Knob, USB port for transfer and upgrading firmware |                                                                |                       |                      |
| Rack mount Handles                    | Yes                                                                              |                                                                |                       |                      |
| FAN                                   | Temperature Control                                                              |                                                                |                       |                      |
| Protection Circuits                   | OCP, OVP, OPP, OTP, RCP, PRI_UVP, PRI_OVP, PRI_OTP, PRI_OCP, USB_OCP             |                                                                |                       |                      |
| Interface                             | Standard USB, RS-485, RS-232, LAN, GPIB is Optional                              |                                                                |                       |                      |
| <b>Environment</b>                    |                                                                                  |                                                                |                       |                      |
| Operating Temperature                 | 0°C~40°C                                                                         |                                                                |                       |                      |
| Storage Temperature                   | -40°C~85°C                                                                       |                                                                |                       |                      |
| Fan Noise                             | 55dB Min; 76dB Max.                                                              | 56.8dB Min; 77.8dB Max.                                        | 58dB Min; 79dB Max.   |                      |
| Altitude                              | 2000m                                                                            |                                                                |                       |                      |
| Relative Humidity                     | 5%~95%, non-condensing                                                           |                                                                |                       |                      |
| Temperature Coefficient               | 100ppm/°C at Voltage, 300ppm/°C at Current, 100ppm/°C at Frequency               |                                                                |                       |                      |
| <b>Mechanical</b>                     |                                                                                  |                                                                |                       |                      |
| Dimensions(WxHxD)                     | 560.0x754.0x700.0 mm                                                             | 560.0x754.0x700.0 mm                                           | 560.0x932.0x700.0 mm  |                      |
| Package Dimensions(W xHxD)            | 680.0x1146.0x820.0 mm                                                            | 680.0x1146.0x820.0 mm                                          | 680.0x1297.0x820.0 mm |                      |
| Unit Weight                           | 128.0kg                                                                          | 157.0kg                                                        | 224kg                 |                      |
| Shipping Weight                       | 163.0kg                                                                          | 195.0kg                                                        | 265.0kg               |                      |
| <b>Regulatory Compliance</b>          |                                                                                  |                                                                |                       |                      |
| CE Mark                               | Installation Overvoltage Category II; Class II equipment; indoor use only.       |                                                                |                       |                      |

[1]In parallel mode, the amount needed to be reduced to 90 %

[2]Calibration function only available for single unit.

All specifications are subject to change without notice.

# SPS-300 Series AC Power Supply System

| MODEL                                | SPS300VAC10000W-4-17                                                                                                       |                                                                                                       | SPS300VAC15000W-4-17 |          | SPS300VAC20000W-4-21 |           |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|----------------------|----------|----------------------|-----------|
| <b>Input</b>                         |                                                                                                                            |                                                                                                       |                      |          |                      |           |
| Voltage                              | 190~265VAC                                                                                                                 |                                                                                                       |                      |          |                      |           |
| Frequency                            | 47~63Hz                                                                                                                    |                                                                                                       |                      |          |                      |           |
| Phase                                | 3 Phase, 4Wire+Groud/Y Connect                                                                                             |                                                                                                       |                      |          |                      |           |
| Max.Current                          | 60A                                                                                                                        |                                                                                                       | 90A                  |          | 120A                 |           |
| Power Factor at 220VAC Input, Full   | ≥0.99, Active PFC                                                                                                          |                                                                                                       |                      |          |                      |           |
| Efficiency                           | >87% (Peak)                                                                                                                |                                                                                                       |                      |          |                      |           |
|                                      | >86% at 220VAC, 50Hz input/230VAC, 50Hz output)                                                                            |                                                                                                       |                      |          |                      |           |
| <b>Output</b>                        |                                                                                                                            |                                                                                                       |                      |          |                      |           |
| AC Power(Total) <sup>(1)</sup>       | 9000VA                                                                                                                     |                                                                                                       | 13500VA              |          | 18000VA              |           |
| Max.Current (r.m.s) <sup>(1)</sup>   | 0~150V(L)                                                                                                                  | 82.8A                                                                                                 |                      | 124.2A   |                      | 165.6A    |
|                                      | 0~300V(H)                                                                                                                  | 41.4A                                                                                                 |                      | 62.1A    |                      | 82.8A     |
| Max.Current (Peak) <sup>(1)</sup>    | 0~150V(L)                                                                                                                  | 331.2A                                                                                                |                      | 496.8A   |                      | 662.4A    |
|                                      | 0~300V(H)                                                                                                                  | 165.6A                                                                                                |                      | 248.4A   |                      | 331.2A    |
| Voltage(AC)                          | Range                                                                                                                      | 0~300VAC, 150V/300V/Auto                                                                              |                      |          |                      |           |
|                                      | Resolution                                                                                                                 | 0.1V                                                                                                  |                      |          |                      |           |
|                                      | Accuracy                                                                                                                   | 0.2% of setting + 0.8%F.S, at Voltage >3V                                                             |                      |          |                      |           |
| Phase Angle (Starting /Ending)       | Range                                                                                                                      | 0~359.9°                                                                                              |                      |          |                      |           |
|                                      | Resolution                                                                                                                 | 0.1°                                                                                                  |                      |          |                      |           |
|                                      | Accuracy                                                                                                                   | ±1° @45~65HZ                                                                                          |                      |          |                      |           |
| Current OC Fold Mode                 | Range                                                                                                                      | 0.1A                                                                                                  |                      |          |                      |           |
|                                      | Resolution                                                                                                                 | 2.0% of setting + 2.0%F.S.                                                                            |                      |          |                      |           |
|                                      | Response Time                                                                                                              | <1400ms                                                                                               |                      |          |                      |           |
| Frequency                            | Range                                                                                                                      | 15~1000HZ Full Range Adjust                                                                           |                      |          |                      |           |
|                                      | Resolution                                                                                                                 | 0.1Hz at 15.0~99.9Hz, 1Hz at 100~1000Hz                                                               |                      |          |                      |           |
|                                      | Accuracy                                                                                                                   | 0.03% of setting                                                                                      |                      |          |                      |           |
| Voltage(DC)                          | Range                                                                                                                      | 0~424Vdc, 212V/424V/Auto                                                                              |                      |          |                      |           |
|                                      | Resolution                                                                                                                 | 0.1V                                                                                                  |                      |          |                      |           |
|                                      | Accuracy                                                                                                                   | 0.3% of setting + 0.8%F.S, at Voltage >3V                                                             |                      |          |                      |           |
| Max.Current(L/H Range)(Total)        | 0~150V(L)                                                                                                                  | L 58.68A                                                                                              |                      | L 88.02A |                      | L 117.36A |
|                                      | 0~300V(H)                                                                                                                  | H 29.34A                                                                                              |                      | H 44.01A |                      | H 58.68A  |
| Ripple & Noise(r.m.s)                | L <1000mVrms @ Bandwidth 20HZ to 1MHZ                                                                                      |                                                                                                       |                      |          |                      |           |
|                                      | H <1500mVrms @ Bandwidth 20HZ to 1MHZ                                                                                      |                                                                                                       |                      |          |                      |           |
| Ripple & Noise(Peak)                 | <4000mVp-p @ Bandwidth 20HZ to 1MHZ                                                                                        |                                                                                                       |                      |          |                      |           |
| <b>Other Parameters</b>              |                                                                                                                            |                                                                                                       |                      |          |                      |           |
| Total Harmonic Distortion(THD)       | <0.5% (Resistive Load) at 15.0~70.0Hz and output voltage within the 80~140VAC at Low Range or the 160~280VAC at High Range |                                                                                                       |                      |          |                      |           |
|                                      | <1% (Resistive Load) at 70.1~500Hz and output voltage within the 80~140VAC at Low Range or the 160~280VAC at High Range    |                                                                                                       |                      |          |                      |           |
|                                      | <1.5% (Resistive Load) at 501~1000Hz and output voltage within the 80~140VAC at Low Range or the 160~280VAC at High Range  |                                                                                                       |                      |          |                      |           |
| Crest Factor(CF)                     | ≤4                                                                                                                         |                                                                                                       |                      |          |                      |           |
| Load Regulation                      | ± 0.5%F.S. @ 15~100HZ (Resistive Load)                                                                                     |                                                                                                       |                      |          |                      |           |
|                                      | ± 0.8%F.S. @ Others Freq (Resistive Load)                                                                                  |                                                                                                       |                      |          |                      |           |
| Line Regulation                      | ± 0.1V                                                                                                                     |                                                                                                       |                      |          |                      |           |
| Programmable Output Impedance        | Not Support                                                                                                                |                                                                                                       |                      |          |                      |           |
| Harmonic & Interharmonics Simulation | Not Support                                                                                                                |                                                                                                       |                      |          |                      |           |
| <b>Measurent(Master)</b>             |                                                                                                                            |                                                                                                       |                      |          |                      |           |
| Voltage                              | Range                                                                                                                      | AC 0~300VAC<br>DC 0~424VDC                                                                            |                      |          |                      |           |
|                                      | Resolution                                                                                                                 | 0.1V                                                                                                  |                      |          |                      |           |
|                                      | Accuracy                                                                                                                   | AC 0.2% of setting + 0.4%F.S. (Notes: Vpeak: 0.6% of setting+1%F.S.)<br>DC 0.3% of setting + 0.4%F.S. |                      |          |                      |           |
| Frequency                            | Range                                                                                                                      | 15~1000HZ                                                                                             |                      |          |                      |           |
|                                      | Resolution                                                                                                                 | 0.1Hz(15.0~99.9Hz), 1Hz(100~1000Hz)                                                                   |                      |          |                      |           |
|                                      | Accuracy                                                                                                                   | 0.1% of setting                                                                                       |                      |          |                      |           |
| Current(r.m.s)                       | Range                                                                                                                      | H 0.3A~46A                                                                                            |                      |          |                      |           |
|                                      |                                                                                                                            | M 0.2A~20A                                                                                            |                      |          |                      |           |
|                                      |                                                                                                                            | L 0.1A~5A                                                                                             |                      |          |                      |           |
|                                      |                                                                                                                            | mA 0.02~1.5A                                                                                          |                      |          |                      |           |
|                                      | Resolution                                                                                                                 | 0.01A                                                                                                 |                      |          |                      |           |
| Accuracy                             | 0.4%+1.0%F.S                                                                                                               |                                                                                                       |                      |          |                      |           |

# SPS-300 Series AC Power Supply System

| MODEL                                 |                                                                                  | SPS300VAC10000W-4-17                                           | SPS300VAC15000W-4-17  | SPS300VAC20000W-4-21 |
|---------------------------------------|----------------------------------------------------------------------------------|----------------------------------------------------------------|-----------------------|----------------------|
| Current(Peak)                         | Range                                                                            | 0.05A~188A                                                     |                       |                      |
|                                       | Resolution                                                                       | 0.01A                                                          |                       |                      |
|                                       | Accuracy                                                                         | 0.4%+1.5%F.S.                                                  |                       |                      |
| Power                                 | Range                                                                            | 0~5100W                                                        |                       |                      |
|                                       | Resolution                                                                       | 0.1W                                                           |                       |                      |
|                                       | Accuracy                                                                         | 0.4% of setting +1%F.S. at PF>0.2, Voltage >5V                 |                       |                      |
| Power Apparent (VA)                   | Range                                                                            | 0~5100VA                                                       |                       |                      |
|                                       | Resolution                                                                       | 0.1VA                                                          |                       |                      |
|                                       | Accuracy                                                                         | Voltage * I <sub>rms</sub> , Calculated value                  |                       |                      |
| Power Resistive (VAR)                 | Range                                                                            | 0~5100VAR                                                      |                       |                      |
|                                       | Resolution                                                                       | 0.1VAR                                                         |                       |                      |
|                                       | Accuracy                                                                         | $\sqrt{(VA)^2 - (W)^2}$ , Calculated value                     |                       |                      |
| Power Factor (PF)                     | Range                                                                            | 0.00~1.00                                                      |                       |                      |
|                                       | Resolution                                                                       | 0.01                                                           |                       |                      |
|                                       | Accuracy                                                                         | W/VA, Calculated value                                         |                       |                      |
| Harmonic                              |                                                                                  | Not Support                                                    |                       |                      |
| Σ Current                             | Range <sup>[1]</sup>                                                             | H 0.3A~82.8A                                                   | H 0.3A~124.2A         | H 0.3A~165.6A        |
|                                       |                                                                                  | M 0.2A~36A                                                     | M 0.2A~54A            | M 0.2A~72A           |
|                                       |                                                                                  | L 0.1A~9A                                                      | L 0.1A~13.5A          | L 0.1A~18A           |
|                                       |                                                                                  | mA 0.02~2.7A                                                   | mA 0.02~4.05A         | mA 0.02~5.4A         |
|                                       | Resolution                                                                       | 0.01A                                                          |                       |                      |
| Accuracy                              | 0.4%+1.0%F.S.                                                                    |                                                                |                       |                      |
| Σ Current                             | Range <sup>[1]</sup>                                                             | 0~9180W                                                        | 0~13770W              | 0~18360W             |
|                                       | Resolution                                                                       | 0.1W                                                           |                       |                      |
|                                       | Accuracy                                                                         | 0.4% of setting +0.3%F.S at PF >0.2, Voltage > 5V              |                       |                      |
| <b>Extra Function</b>                 |                                                                                  |                                                                |                       |                      |
| Remote Sense                          | Range                                                                            | 5V(rms), Max. Total power less than rated power                |                       |                      |
| Slew Rate                             | Range                                                                            | AC Voltage 0.001~1200.000V/ms and Disable                      |                       |                      |
|                                       |                                                                                  | DC Voltage 0.001~1000.000V/ms and Disable                      |                       |                      |
|                                       |                                                                                  | Frequency 0.001~1600.000HZ/ms and Disable                      |                       |                      |
| Transient Generator(only for 15-70HZ) | Range                                                                            | Trans-Start : 0.0~66.5ms@15Hz , Resolution : 0.1ms             |                       |                      |
|                                       |                                                                                  | Trans-Volt : -212V~+212V(L), -424V~+424V(H), Resolution : 0.1V |                       |                      |
|                                       |                                                                                  | Trans-Time : 0.0~66.5ms@15Hz , Resolution : 0.1ms              |                       |                      |
|                                       |                                                                                  | Trans-Cycle : 0~9999, Constant                                 |                       |                      |
| Calibration <sup>[2]</sup>            | Firmware-based calibration through the digital interface or front panel          |                                                                |                       |                      |
| Graphic Display                       | 4.3" Color touch LCD                                                             |                                                                |                       |                      |
| Operation Key Feature                 | Soft key, Numeric key, Rotary Knob, USB port for transfer and upgrading firmware |                                                                |                       |                      |
| Rack mount Handles                    | Yes                                                                              |                                                                |                       |                      |
| FAN                                   | Temperature Control                                                              |                                                                |                       |                      |
| Protection Circuits                   | OCP, OVP, OPP, OTP, RCP, PRI_UVP, PRI_OVP, PRI_OTP, PRI_OCP, USB_OCP             |                                                                |                       |                      |
| Interface                             | Standard USB, RS-485, RS-232, LAN, GPIB is Optional                              |                                                                |                       |                      |
| <b>Environment</b>                    |                                                                                  |                                                                |                       |                      |
| Operating Temperature                 | 0°C~40°C                                                                         |                                                                |                       |                      |
| Storage Temperature                   | -40°C~85°C                                                                       |                                                                |                       |                      |
| Fan Noise                             | 55dB Min; 76dB Max.                                                              | 56.8dB Min; 77.8dB Max.                                        | 58dB Min; 79dB Max.   |                      |
| Altitude                              | 2000m                                                                            |                                                                |                       |                      |
| Relative Humidity                     | 5%~95%, non-condensing                                                           |                                                                |                       |                      |
| Temperature Coefficient               | 100ppm/°C at Voltage, 300ppm/°C at Current, 100ppm/°C at Frequency               |                                                                |                       |                      |
| <b>Mechanical</b>                     |                                                                                  |                                                                |                       |                      |
| Dimensions(WxHxD)                     | 560.0x754.0x700.0 mm                                                             | 560.0x754.0x700.0 mm                                           | 560.0x932.0x700.0 mm  |                      |
| Package Dimensions(W x H x D)         | 680.0x1146.0x820.0 mm                                                            | 680.0x1146.0x820.0 mm                                          | 680.0x1297.0x820.0 mm |                      |
| Unit Weight                           | 128.0kg                                                                          | 157.0kg                                                        | 224.0kg               |                      |
| Shipping Weight                       | 163.0kg                                                                          | 195.0kg                                                        | 265kg                 |                      |
| <b>Regulatory Compliance</b>          |                                                                                  |                                                                |                       |                      |
| CE Mark                               | Installation Overvoltage Category II; Class II equipment; indoor use only.       |                                                                |                       |                      |

[1]In parallel mode, the amount needed to be reduced to 90 %

[2]Calibration function only available for single unit.

All specifications are subject to change without notice.

