SPH80 SERIES

LED Power Supplies: 80 Watts





Specifications

Input Voltage 90 ~ 305VAC Frequency 47~63Hz **Input Current** 0.5A @ 230VAC

Output V/A See table **Output Power** 80 watts

Output Ripple & 12V @ 150mV, 15V @ 200mV,

Noise 24V @ 280mV, 36 & 48V @ 450 / 550mV

Output Current ±5%

Tolerance

±2%

Line Regulation **Load Tolerance** ±3%

Rise Time Typically 30ms (max 500ms 10-90% voltage)

Hold Up Time Typically 15mS at 230V input

Power Factor > 0.95

Efficiency Model Dependent 87 ~ 89% **Inrush Current** Cold start 80A @ 230V **Leakage Current** 0.75mA @ 230V 50Hz

Protection:

Over Current 1.05 ~ 1.3% times rated current.

(Auto Recovery)

Short Circuit Hiccup mode with auto recovery

Overvoltage Yes. Recycle input power after approx 30sec **Over Temperature** Recycle input power after unit has cooled off

Operating Temp. -40°C ~ +70°C (80% load at +70°C)

Humidity 5~95% RH **Temp Coefficient** ±0.05% per °C **IP Rating** IP65 (IP66 option) Cooling Free air convection

Connections Input & Output flying leads

Input Power Cord & Plug - Option

Safety EN61347-1, EN61347-2-13 **Isolation Voltage** Input - Output: 5.3KV DC 1min.

EMC EN55015 Class B **Immunity** EN61000-4-2 **Harmonics** EN6100-3-2

MTBF 5 years per MIL-HDBK-217F (25° C)

Mechanical 173 x 62 x 37mm 800g

Features

- Constant Voltage / Constant Current operation
- Output Voltage & Current adjustment
- Wide input range: 90 ~ 305VAC
- High Efficiency up to 89%
- Power Factor Correction typically 0.95
- IP65 sealed unit
- Output short circuit protection
- Over temperature protection
- Safety: EN61347-1 & -2
- **EMC** and Immunity compliant
- Optional mains power cord

Description

The SPH80 series power supplies are designed specifically for use with LED applications and available with output voltage options from 12 ~

These units can operate in Constant Voltage or Constant current mode and output voltage & current is fully adjustable, providing total flexibility.

Electronic protection turns off the power supplies in case of short circuit or overload, as well as open circuit or over temperature.

These units are designed to be hard wired in fixed installations, or with an optional power cord, that can be connected to the input terminals with a standard AC plug, for easy installation to any GPO socket / outlet

| Model | Out V | tput A | Output A | Adjustment A | Power W |
|-----------|----------|-----------|----------|-----------------|------------|
| SPH80-12A | 12V | 6.7A | 8 -13.5V | 3.5 ~ 6.7A | 80W |
| SPH80-15A | 15V | 5.33A | 10 - 17V | 2.5 ~ 5.33A | 80W |
| SPH80-24A | 24V | 3.33A | 15 - 27V | 1.6 ~ 3.33A | 80W |
| SPH80-36A | 36V | 2.22A | 32 - 41V | 1.1 ~ 2.22A | 80W |
| SPH80-48A | 48V | 1.67A | 42 - 54V | 0.8 ~ 1.67A | 80W |

For optional input mains power cord & plug, add -AC to model.

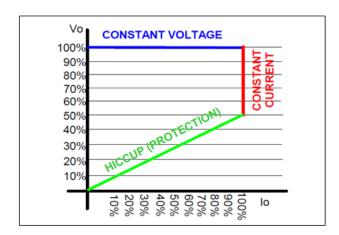


Fig 1: Typical Constant Voltage / Constant Current curve.