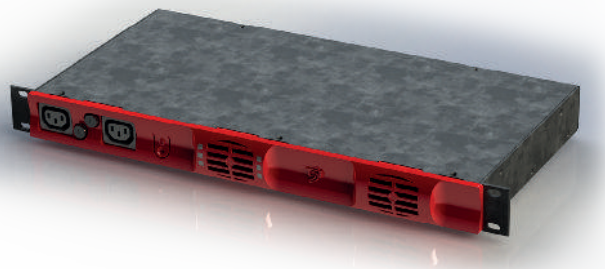
HELIOS
POWER SOLUTIONS

Y-ONE 230 VAC

0.5-1.5 kVA

STANDALONE INVERTER SYSTEM

POWER 500 VA / 800 VA / 1500 VA
INPUT 48 Vdc
OUTPUT 230 Vac



DESCRIPTION

Y-ONE is a compact inverter providing a pure sine wave AC supply. In conjunction with a DC Power system, it provides an excellent AC backup solution. It uses the latest inverter technology, providing superior energy efficiency in a compact size.

The “Twin Sine Innovation” (TSI) technology provides high efficiency of up to 92% reducing operating costs .

Model available in rear terminal AC output or front 2xIEC socket protected by fuse. The available models present either a rear connected bulk AC outlet or 2 front connected IEC output. See pictures.

Optional Manual By Pass available for easy Y-One module swapping.

APPLICATIONS

All business critical applications and all types of AC loads. The design is cost effective, installation easy.

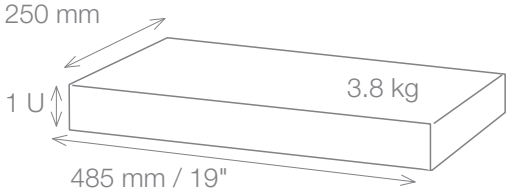
MAIN FEATURES

- Dual input sources (AC & DC) with wide AC input range 150 Vac to 265 Vac
- By-Pass function embedded
- Compact design
- High efficiency
- Transfer time AC to DC and DC to AC reduced to 0 ms
- Short depth allows 300 mm rack integration

Y-ONE

	EPC-500 (48V/230)	EPC-800 (48V/230)	EPC-1500 (48V/230)
GENERAL			
EMC (immunity)	EN 61000-4-2 up to 6		
EMC (emission) (class)	EN 55022 (A)		
Safety	IEC 60950-1- EN62040-1-1		
Cooling / Isolation	Forced / Doubled		
MTBF	240 000 hrs		
Efficiency (Typical): Enhanced power conversion / on line	92% / 89%		94% / 90%
Dielectric strength DC/AC	4300 Vdc		
True Redundant Systems – compliant	3 disconnection levels on AC out and DC in power ports		
	4 disconnection levels on AC in port		
RoHS	Compliant		
Vibration	GR63 office vibration 0 to 100 hz-0.1 g / transport vibration 5-100 Hz 0.5 g 100 to 500 hz-1.5 g / Drop test		
Operating conditions	Designed for installation in an IP20 or IP21 environment. When installed in a dusty or corrosive environment, appropriate measures (air filtering, …) must be taken.		
Altitude above sea without de-rating	< 1500 m / derating > 1500 m – 0.8 % per 100 m		
Ambient / storage temperature / relative humidity	-20 to 50 ° C / -40 to 70 ° C / 95 %, non-condensing		
Material (casing)	Coated steel		
AC OUTPUT POWER			
Nominal Output power (VA) / (W)	500 / 400	800 / 640	1500 / 1200
Short time overload capacity	150 % (15 seconds) 110 % permanent within T° range		
Admissible load power factor	0 lagging to 0 leading		
DC INPUT SPECIFICATIONS			
Nominal voltage (DC)	48 V		
Voltage range (DC)	40 - 60 V		
Nominal current (at 40 V and 400W (Y-one 500)/640 W (Y-one 800)/1200 W (Y-One 1500))	11.2 A	18 A	33 A
Maximum input current (for 15 second) / voltage ripple	17 A / 2 mV PSO	27 A / 2 mV PSO	50 A / 2 mV PSO
Input voltage boundaries	N/A		
AC INPUT SPECIFICATIONS			
Nominal voltage (AC)	230 V		
Voltage range (AC)	150-265 V		
Brownout	150 to 185 V linear derating		
	400 VA @ 150 Vac	640 VA @ 150 Vac	1200 VA @ 150 Vac
Conformity range before transfer to DC	Adjustable		
Power factor	> 99%		
Frequency range (selectable) / synchronization range	50 – 60 Hz / range 47 – 53 Hz / 57 – 63 Hz		
AC OUTPUT SPECIFICATIONS			
Nominal voltage (AC*)	230 V		
Frequency / frequency accuracy	50 or 60 Hz / ±0.01 %		
Total harmonic distortion (resistive load)	< 1.5 %		
Load impact recovery time	0.4 ms		
Turn on delay	20 s		
Nominal current. Protected against reverse current	2.2 A	3.5 A	6.5 A
Crest factor at nominal power With short circuit management and protection	2.8 : 1		
Short circuit clear up capacity	10 x I_n for 20 msec - Available while Mains is available at AC input port With magnitude control and management		
Short circuit current after clear up capacity	2.1 I_n during 15 s and 1.5 I_n after 15 s		
TRANSFER TIME PERFORMANCE AC to DC and DC to AC			
Max. voltage interruption / total transient voltage duration (max)	0 ms / 0 ms		
SIGNALING & SUPERVISION			
Display	Synoptic LED on front of the module		
Alarms output / supervision	Dry contact on shelf at the rear of the module		
Remote on / off	On rear terminal of the module		

*Operation within lower voltage networks leads to de-rating of power performances.



V1.1