HELIOS
POWER SOLUTIONS

e-one 1000 VA
with by pass

e-one, stand-alone inverters a step forward!
Incredible compactness and reliability, while protecting loads and batteries.

Telecom Datacom Mass transport Others

DC In	AC In	AC Out	Power
48 Vdc	230 Vac	230 Vac	1 kVA 0.8 kW

Main Features:

e-one 1000 VA with by pass is a stand-alone inverter capable of converting a 48 Vdc power source into a pure sine wave of 230 Vac at 50 or 60 Hz. By default this inverter runs on DC mode but when this mode fails, it will automatically operate in By-pass mode.

This inverter can deliver 1,000 VA / 800 W while operating from -20 to 65°C. e-one can be easily rack, wall or desk-mounted.

Best in-class solution?

Withdimensions of 1U x 342 mm x 221 mm, this very small inverter occupies just 3,300 cm^3 while our competitors' products are almost double the size.

e-one provides a perfect AC output (pure sine wave) that lets your **critical loads to work their best**

We also guarantee a very low ripple voltage compliant with the telecom standard. In practical terms, this means almost no disturbances reach your DC load or **batteries**; a great benefit as disturbances considerably reduce battery life.

To minimize yourmaintenance costs, we have incorporated a variable fan speed for cooling. The fan's speed changes, or it switches off entirely, according to need. This reduces fouling and other maintenance problems.

Finally, regarding **reliability**, the e-one inverter is based on our Y-One inverter which has an incredibly low failure rate.

Applications

e-one is the ideal solution for powering and securing any AC equipment: **telecommunication** (5G, WiFi repeaters, supervision, maintenance, cooling, security and access for base stations, etc.), **mass transport** (signalling systems for trains, GSMR along the track, etc.) and many others (CCTV cameras for traffic control system, police radio network, etc.).

Illustrations are non-binding and may include customized fittings.

e-one with by pass 1000 VA 230 Vac

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General	
Cooling	Forced cooling with FAN speed control
MTBF	200 000 hrs
Peak Efficiency DC/AC	91%
Dielectric strength DC/AC	4300 Vdc
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
Altitude above sea without de-rating	< 1500 m / derating > 1500 m – 0.8 % per 100 m
Ambient / storage temperature / relative humidity	-20 to 65° C / -40 to 70° C / 95 %, non-condensing Derating from 50° C to 65° C
Material (casing)	Coated steel
Power	
AC Output Power	
Nominal Output power (VA) / (W)	1000 VA / 800 W
Short time overload capacity	150 % (15 seconds) 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 800 W / 48 VDC	19 A
Maximum input current (for 15 seconds) / voltage ripple	28 A / 2 mV psopho @ 48 V - 80% LOAD
AC Input Specifications	
Nominal voltage (AC)	230 V
Nominal frequency	Separate part number for 50 Hz and 60 Hz
Voltage range	207 - 253 Vac
Frequency range	50 Hz (range 47 – 53 Hz) / 60 Hz (range 57 – 63 Hz)
AC Output Specifications*	
Nominal voltage (AC)	230 V
Frequency / frequency accuracy	Separate part number for 50 Hz / ± 0.1% and 60 Hz / ± 0.1%
Total harmonic distortion (resistive load)	< 3 %
Turn on delay	20 s
Nominal current. Protected against reverse current	4.35 A at 230 VAC
Crest factor at nominal power	2.5 : 1
With short circuit management and protection	> 9A (2xIn) for 15 s and then no output power from module
Transfer time from DC mode to By-pass mode and vice-versa	< 10 ms
Signaling & Supervision	
Display	Front LED
Alarms output / supervision	Dry contact on the front
Remote ON / OFF	On the front
Standard Compliances	
Standards	IEC60950
	ETS 300 386 – 2 : 2mV
	EN 55022 Class A Radiated and Conducted
	ETS 300 132 – 2 : Product Standard
	IEC 61000-3-2 harmonic current class A
	EN61000-4-2 ESD criteria A - 15 kV Air and 8 kV contact
	EN61000-4-3 RF Field – Enclosure Port criteria A : 10 V/m
	EN61000-4-4 Burst - All ports criteria A : 2kV
	EN61000-4-5 Surge criteria B all ports
	EN61000-4-6 class A criteria A 10V

* This specification is valid for DC mode only. In By-pass mode, the output will be same as AC input.