

e-one 10 - 48/230



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



#### Main Features:

e-one 10 - 48/230 is a stand-alone inverter capable of converting a **48 Vdc** power source into a **pure sine wave of 230 Vac** at 50 Hz. This inverter can deliver 1 kVA / 0.8 kW while operating from -20 to 65°C. e-one can be easily rack, wall or desk-mounted.

This inverter is available in two versions: **regular** (DC input only) and **by-pass** (AC and DC input). In by-pass version, the inverter can automatically switch from the DC source to the AC source if there are problems (with the batteries, charger or distribution). Another way to better secure your critical loads.

#### Best in-class solution?

With dimensions of 1U x 342 mm x 221 mm, the e-one occupies just 3,300 cm<sup>3</sup> 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 your **maintenance 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 10 - 48/230

General	Bypass (AC and DC Input)
Part Number	T551730201
Cooling / Audible noise	Forced cooling with FAN speed control / < 65 dBA at one meter
MTBF	200 000 hrs
Dielectric strength DC/AC	4250 Vdc
RoHS	Compliant
	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
Vibration	/ Drop test
Altitude above sea without de-rating	< 1500 m / de-rating > 1500 m – 0.8 % per 100 m
Ambient / storage temperature / relative humidity	-20 to 65° C / -40 to 70° C / 95 %, non-condensing De-rating from 40° C to 65° C
Material (casing)	Coated steel
Power	
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	50 Hz
Voltage range	207 - 253 Vac
Frequency range	50 Hz (range 47 – 53 Hz)
AC Output Specifications*	
Peak Efficiency DC/AC	91%
Peak Efficiency AC/AC	99%
Nominal voltage	230 Vac
Frequency / frequency accuracy	50 Hz / ± 0.1%
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
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
Short circuit current duration	> 9A for 200 ms, then inverter stops and needs a manual restart
Transfer time from DC mode to By-pass mode and vice-versa	< 10 ms
AC output voltage stability	±2% from 0% to 100% load
Signaling & Supervision	
Display	Front LED
Alarms output / supervision	Dry contact on the front
Remote ON / OFF	On the front
Standard Compliances	
Safety	IEC62040-1
Psophometric	ETS 300 386 – 2 : 2mV
EMI / EMC	EN 55032 Class A Radiated and Conducted IEC 61000-3-2 harmonic current class A EN61000-4-2 ESD criteria A - 15 kV Air and 8 kV contact EN61000-4-3 BF 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
	EN61000-4-8 30 A/m

 $^{\ast}$  This specification is valid for DC mode only. In By-pass mode, the output will be same as AC input.

3.0 kg 342 mm

e-one 10 - 48/230 - Datasheet - v2.7 Specifications can change without notice. New data will be updated on our Web site: <u>www.cet-power.com</u>. The present equipment is protected by several international patents, trademarks and copyrights.