



Telecommunications



Data centers



Industries



Renewable

STAND-ALONE INVERTER E-ONE 10 48/230

INVCETEONE10

ECI
technology inside



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 cm³ 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.).



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SPECIFICATIONS

INVCETEONE10	
General	
Cooling / Audible noise	Forced cooling with FAN speed control / < 65 dBA at one meter
MTBF	200 000 hrs
Dielectric strength DC/AC	4300 Vdc
RoHS	Compliant
Vibration	GR63 of ce 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 / 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 50° 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 (AC)	230 V
Frequency / frequency accuracy	50 Hz / $\pm 0.1\%$
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 time overload capacity	1.6 A at 230 VAC
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
Signaling & Supervision	
Display	Front LED
Alarms output / supervision	Dry contact on the front
Remote ON / OFF	On the front

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

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Standard Compliance

Standards

EC60950
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

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