



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

 Telecom
  Datacom
  Mass transport
  Others



## 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 or 60 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?

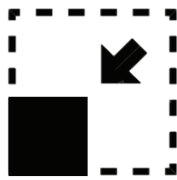
With **dimensions** of 1U x 342 mm x 221 mm, the e-one occupies just 3,300 cm<sup>3</sup> while our competitors' products are almost double the size.

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

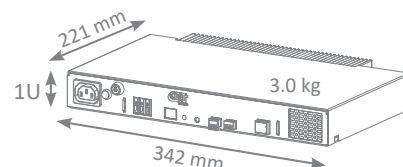
e-one is the ideal solution for powering and securing any AC equipment: **telecommunication** (5G, WiFi repeaters, supervision, maintenance, cooling, security and access for base stations, etc.), **mass transport** (signalling systems for trains, GSMR along the track, etc.) and many **others** (CCTV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

Illustrations are non-binding and may include customized fittings.

# e-one 10 - 48/230

General	Regular (DC Input)	Bypass (AC and DC input)
Part Number	T551730211	T551730201
Cooling	Forced cooling with FAN speed control	
MTBF	200 000 hrs	
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 / 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 (also available in 60 Hz)
Voltage range	-	207 - 253 Vac
Frequency range	-	50 Hz (range 47 – 53 Hz) / 60 Hz (range 57 – 63 Hz)
AC Output Specifications*		
Peak Efficiency DC/AC	-	91%
Peak Efficiency AC/AC	-	99%
Nominal voltage (AC)	-	230 V
Frequency / frequency accuracy	-	50 Hz / ± 0.1% (also available in 60 Hz)
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
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.



e-one 10 - 48/230 - Datasheet v2.1 Specifications can change without notice. New data will be updated on our Web site: [www.cet-power.com](http://www.cet-power.com).  
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