

e-one 10 - 48/230

Quick Startup Guide

What's in the box?

- e-one 10 - inverter
- 1 x IEC Male plug
- 1 x 6.3 A Fuse
- 1 x Ferrite core (By-pass model)
- 1 x IEC Male plug
- 2 x Rack and Wall clamps
- 3 x Connectors (DC, Alarm, & Remote ON/OFF)
- 8 x M3 Screws
- 4 x M6 Cage Nuts, Screws, Spring and Flat Washers

Product Description

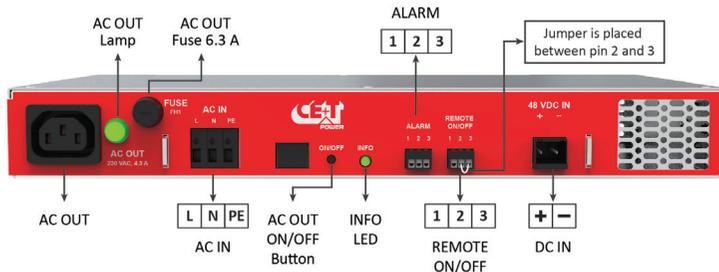
e-one 10 - 48/230 is a standalone inverter capable of converting from 48 Vdc to 230 Vac and delivering an output power of 1 kVA. Additionally AC input is featured for bypass operation. It has been designed for IP20 environment with a maximum operating ambient temperature of 40°C (104°F). De-rating is above 40°C to 65°C.

e-one can operate alone or can be connected to other devices to receive alarm status and/or to turn On/Off remotely.

This inverter is available in two models: **Regular** (DC input only) and **By-pass** (AC and DC input).

Specifications

- Dimension - 342 mm (W) x 43.5 mm (H) x 221 mm (D).
- Weight - 3.2 kg (7 Lbs).



e-one 10 - 48/230 - Termination Details

Note: In Regular models, AC IN connector and AC Out Lamp will not be present.

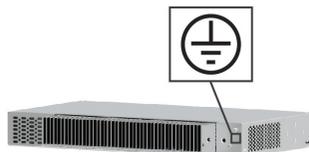
Electrical Connections

Grounding

Earth connection must be done to the point referenced with Ground symbol .

Input ground must be connected to the appropriate terminal.

Caution: Current leakages can reach hazardous values. For your personal SAFETY earth connections must be done before energizing the system.



DC Input

Model	DC input current at 40 Vdc	DC breaker Recommended	Cable size	Max size	
Regular	22 A*	30 A	4 mm ²	1 x 6 mm ² per pole	
By-pass					

* Recommended upstream protection: minimum 30 A (Not Included).

AC Input (By-pass model)

Wind 4 turn of AC input phase and neutral on supply through ferrite core. Also the core should be near to the module.

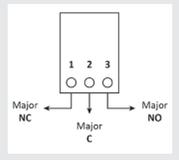
Model	I _{in} @ 230 Vac	Cable size		
By-pass	4.35 A**	1.5 mm ²		

** Recommended upstream protection: minimum 10 A (Not Included).

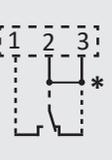
AC Output

Model	I _{out} @ 230 Vac	Cable size	
Regular	4.3 A	1.5 mm ²	
By-pass			

Alarm Connections

Model	Maximum Voltage	Switching				
		Capacity	Power	Current		
Regular	60 Vdc	1A @ 60 Vdc	30 W	1 A		
By-pass						

Remote ON/OFF Connections

States	Pin 1-3	Pin 2-3	System status		
1	Open	Open	System working normally		
2	Closed	Open	Output switched OFF LED OFF		
3	Open	Closed	System working normally		
4	Closed	Closed	System working normally		

* To remove when external remote is used.

Warning: If remote ON/OFF not used, pin 2 and 3 MUST be bridged together!

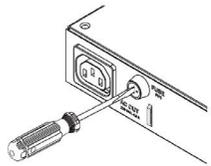
AC Output - Front Fuse (6.3 A)

Manufacturer	Manufacturer Part Number	Current Rating	Voltage Rating AC	Fuse Size/Group
Schurter	0034.3125	6.3 A	250 Vac	5 mm x 20 mm

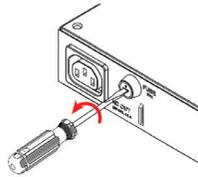
Replacing Front Fuse (6.3 A)

Step 1: By using the Flat Screw Driver gently turn the Fuse holder to 45° in anti clock wise direction. The Fuse Holder automatically ejects from the slot. (Fuse holder will not go beyond 45°).

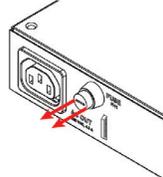
Step 2: Remove the Fuse holder from the slot and replace with new fuse.



Place the Screw Driver



Rotate 45° in anti-clockwise



Remove the Fuse

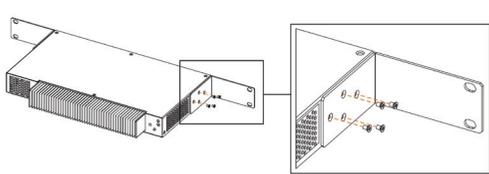
Warning: Risk of electric shock, do not replace the Fuse in system running condition

Mounting Procedure

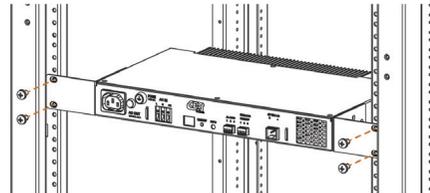
Option 1: Rack Mounting

Step 1: Fix the L-Clamps on both sides of the e-one module with M3 screws.

Step 2: Place the e-one module inside the cabinet horizontally and fix with the screws.



Fix the Brackets on both sides

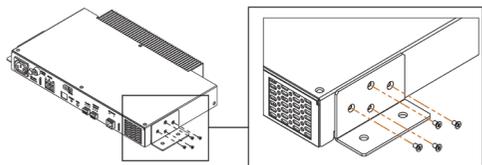


Place the module inside the cabinet

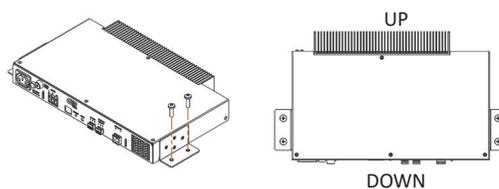
Option 2: Wall Mounting

Step 1: Fix the L-Clamps on both sides of the e-one module with M3 screws.

Step 2: Place the e-one module on the wall and fix with the screws.



Fix the Brackets on both sides



Fix the module on the wall

LED Indications - Alarm status

There is one LED at front for input and output status.

S. NO	INFO LED	Description	Alarm
1	OFF	No inverter output	✓
2	Permanent GREEN	Inverter working fine	-
3	Fast - Blinking GREEN	DC source is out of range	✓
4	Blinking ORANGE	Output Power / VA Derating / Temperature Derating	-
5	Slow - Blinking RED	Inverter output short-circuited	-
6	Fast - Blinking RED	Module over-temperature and output OFF	✓
7	Permanent RED	Inverter output OFF due to permanent short-circuit	✓
8	Blinking RED - ORANGE	Inverter output voltage is out of range	-
9	Blinking RED - GREEN	Inverter output OFF (Load transfer to BYPASS) Due to Load power too High	✓
10	Slow - Blinking GREEN	AC Input - Unavailable / Out-of-range	-
11	Permanent ORANGE	Inverter overloaded output unavailable (Load transfer to BYPASS)	✓

Lamp status (By-pass model)

S. No	AC OUT LAMP	Description
1	ON	Voltage present at output terminal
2	OFF	Voltage is not present at output terminal

Final check before start up

Human safety: To prevent electric shock, use insulated tool and wear insulated gloves when connecting the power cables.

1. Make sure that the inverter is properly fixed to the cabinet.
2. Make sure that the inverter is connected to Ground.
3. Make sure that all DC Input, AC Input and AC Output breakers are switched OFF.
4. Make sure that all cables are according to recommendations and local regulations.
5. Make sure that all cables are strained relieved.
6. Make sure that the Remote ON/OFF is appropriately wired.
7. Re tighten all electrical terminations.
8. Make sure that DC polarity and AC IN phase & neutral is according to marking.
9. Switch ON DC Input breaker.
10. Switch ON AC Input breaker. (Applicable for By-pass model)

Inverter starts and delivers AC output voltage.

For more information, download the datasheet and manual at www.cet-power.com or contact us at customer.support@cet-power.com



Datasheet