

# 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



## 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?

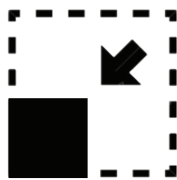
With dimensions of 1U x 342 mm x 221 mm, this very small inverter occupies just 3,300 cm<sup>3</sup> while our competitors' products are almost double the size.

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.

| 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<br>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 |

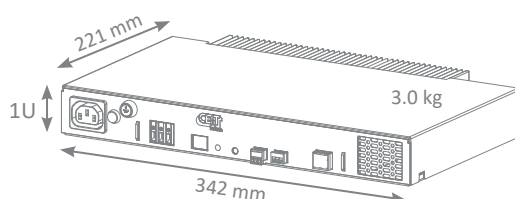
| AC Input Specifications |   |
|-------------------------|---|
| Nominal voltage (AC)    | 230 V   |
| Nominal frequency       | Separate part number for 50 Hz and 60 Hz            |
| Voltage range           | 207 - 253 Vac                                       |
| Frequency range         | 50 Hz (range 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.



e-one 230 1kVA - By-pass - Datasheet v1.0 Specifications can change without notice. New data will be updated on our Website: [www.heliosps.com](http://www.heliosps.com)