Technical Data Sheet

E-POWA Autonomous Power Enclosure — 500 Wh



Reference | E-POWA500

E-POWA can power cameras, antennas, measurement and control equipment using energy stored from a streetlight supply.

Designed for a continuous supply, including when street lighting is switched off.

Metal enclosure. Pole mounting: up to Ø 200 mm. Three PG7 cable glands (12 mm). Optional PoE injector.

Protections

- ✓ 16 A, curve D miniature circuit breaker
- ✓ 20 kA surge protection device

Technical Specifications

PRODUCT

Product reference: E-POWA500

INPUT

Supply voltage: 180–264 V AC, 50–60 Hz

Maximum input current: 2.5 A

Power factor: > 0.98

Protection class: Class I

OUTPUT

Unregulated output: 22–29.2 V / 5 A max.

Maximum output power: 75 W

Regulated 12 V output: 12 V ±2% / 5 A*

Regulated 24 V output: 12 V ±2% / 2.5 A*

Regulated 48/52 V output: 52 V ±2% / 1.5 A*

Available energy: 450 Wh

BATTERY

Capacity: 20 Ah

Stored energy: 500 Wh

Charging current: 10 A

Cycle life (80% DoD): 2,000

Charging temperature: −20 to +50 °C

Discharging temperature: −20 to +45 °C

CONNECTIONS

Mains: 16 A breaker + earth terminal

Output 1: 4 mm² spring terminal

Output 2: 4 mm² spring terminal

Dimensions: 600 (L) × 200 (W) × 135 (H) mm

Weight: 10 kg

Enclosure: IP66 metal, outdoor use

Warranty: 2 years

RoHS Compliant

PASSED Transport Safety Certified

*Optional regulated outputs: EP-12VREG, EP-24VREG or EP-52VREG. Two outputs can be used simultaneously in the combinations shown below.

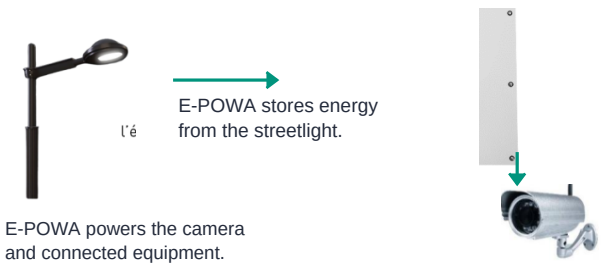
Output 1	Output 2
25 V unregulated	12 V regulated
24 V regulated	12 V regulated
25 V unregulated	48 V regulated

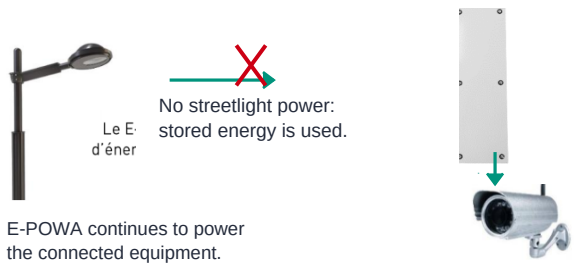
NR: unregulated R: regulated

The available output power depends on the duration of public street lighting. The longer the lighting period, the more energy E-POWA can store for the installation.

Public lighting duration	Available output power
0.5 h	4.1 W
1 h	8.3 W
1.5 h	12.8 W
2 h	17.5 W
2.5 h	18.8 W
3 h	19.2 W
4 h	20.2 W
5 h	21.2 W
6 h	22.4 W
7 h	23.7 W
8 h	25.2 W

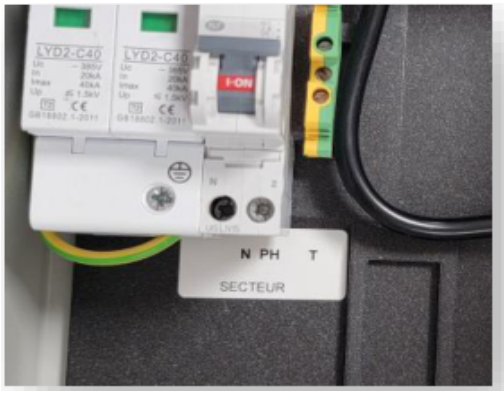
Operating Principle





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Mains Input Terminal



Single-phase input with earth via a 16 A breaker. A surge protection device is incorporated for the mains supply.

Output Terminal



Two 4 mm² spring-terminal outputs are provided for the connected equipment.

Cable Glands



Three cable glands are provided for the E-POWA supply and outgoing cables.

PoE Injector Mount



A mounting bracket allows a four-output PoE injector to be fitted for camera power.