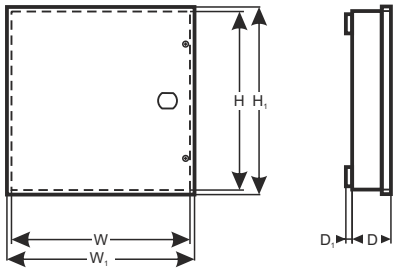
POE series power supply unit
PoE buffer power supply 48V DC for up to 8 IP camera.

EN*

CODE: **POE0848C** v.1.0/III
TYPE: **PoE 48V/2,6A/2x17Ah PoE buffer power supply for up to 8 IP cameras.**



PSU features:

- DC 48V uninterruptible power supply to 8 cameras IP
- space for two batteries: 17Ah/12V
- built-in 24/48V converter
- Wide range of AC supply voltage: 176÷264V
- High efficiency: 80%
- battery charging and maintenance control
- deep discharge battery protection (UVP)
- battery charging current: 0,5A
- Approximate backup time: 5h 40min
- battery output protection against short circuit and reverse connection
- designed for 10Mbit/s and 100Mbit/s network
- LED optical indication
- protections:
  - SCP short-circuit protection
  - Surge protection
  - Antisabotage protection
  - OLP overload protection
- warranty – 2 year from the production date

DESCRIPTION

The PSU is designed for supply of up to 8 webcams requiring stabilized voltage of **48V DC (+/- 1V)**. The PSU supplies voltage of **48V DC** and total current capacity of **I=8x0,32A+0,5A Battery charging***.
In case of mains power loss, the unit will instantly switch to battery operation.

The approximate backup time is given assuming that all output ports are used (using typical devices and 17Ah batteries). The electricity consumption for own needs and the energy efficiency of the power intake track were taken into account. The exact description of how to perform the calculations can be found at: "Approximate backup time - assumptions for calculations".

The power supply is constructed on the basis of a switch mode PSU with high energy efficiency and 24/48V DC boost converter and is housed in a metal enclosure (RAL 9003) with battery space for a 2x17Ah / 12V battery. A micro switch indicates door opening (front cover). The power is carried over the spare pairs (4/5 & 7/8), which, according to the Ethernet network standard, are not used for data transmission (data transmission uses 1/2 and 3/6 data pairs).

The PSU can not be used in Gigabit Ethernet networks, where all twisted pairs are involved in the transmission of data!

During normal operation, the total current drawn by the device should not exceed I=8x0,32A*.

Maximum battery charging current is 0,5A.

* See diagram 1

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SPECIFICATIONS	
PSU type:	A (EPS - External Power Source)
Mains supply:	176÷264V AC
Current consumption:	1,4A@230VAC max.
PSU's power:	139W max.
Efficiency:	80%
Output voltage:	48V DC (+/- 1V)
Output current t_{AMB}<30°C	**8 x 0,32A – see diagram 1**
Output current t_{AMB}=40°C	**8 x 0,2A – see diagram 1**
Ripple voltage	150 mV p-p max.
PSU current consumption	0,15A
Battery charging current	0,5A
Approximate backup time	5h 40min
Short-circuit protection SCP	F3,15A- melting fuse (in case of a failure, fuse-element replacement required)
Overload protection OLP	110-150% PSU power, manual restart (the fault requires disconnection of the DC output circuit)
Battery circuit protection SCP and reverse polarity connection	melting fuse F15A
Surge protection	varistors
Deep discharge battery protection UVP:	U<19V (± 5%) – disconnecting the battery terminal
Antisabotage protection: - TAMPER output indicating enclosure opening	- microswitch, NC contacts (enclosure closed), 0,5A@50V DC (max.)
Optical indication of operation:	Yes –LED lights
Operating conditions:	2nd environmental class, -10 °C÷40 °C
Enclosure:	DC01 steel plate, 1,0mm, color RAL 9003
Dimensions:	W=400, H=350, D+D_1=92+8 [+/- 2mm] W_1=405, H_1=355 [+/- 2mm]
The dimensions of the battery compartment	370x170x85mm (WxHxD) max
Net/gross weight:	3,8kg / 4,0kg
Closing:	Cylindrical screw x 2 (at the front), lock assembly possible
Declarations, warranty	CE, 2 year from the production date
Notes:	The enclosure has a 14mm distance from the mounting surface so the cables can be led. Switch mode power supply: Φ0,63-2,5 (AWG 22-10) LAN/PoE outputs 1...8: RJ45 8P8C TAMPER output: wires, 30cm

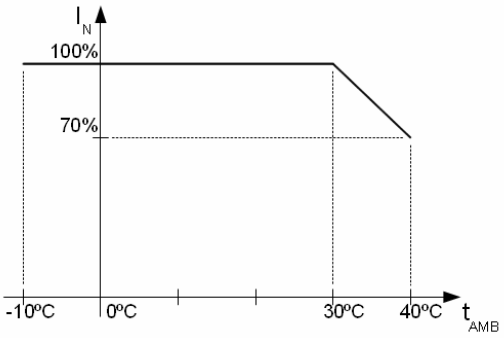

Diagram 1. Maximum permissible output current depending on ambient temperature.