

POE series power supply unit

PoE power supply 54V DC for up to 16 IP camera with battery backup



EN*

CODE: **POE1648C** v.1.0/1

TYPE: **PoE 54V/5A/4x17Ah** PoE power supply for up to 16 IP cameras with battery backup



PSU features:

- DC 54V uninterruptible power supply to 16 cameras IP
- battery housing: 4x17Ah/12V
- Wide range of AC supply voltage: 176÷264V
- High efficiency: 85%
- battery charging and maintenance control
- deep discharge battery protection (UVP)
- battery charging current: 0,5A
- 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
 - OVP overvoltage 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 16 webcams requiring stabilized voltage of **48V DC (+/-15%)**. The PSU supplies voltage of **54V DC** and total current capacity of **I=16x0,3A+0,5A Battery charging***. In case of mains power loss, the unit will instantly switch to battery operation. The PSU is constructed based on the switch mode PSU, with high energy efficiency. The PSU is housed in a metal enclosure (colour RAL 9003) which can accommodate a 4x17Ah/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=16x0,3A*. Maximum battery charging current is 0,5A. Total current of the receivers + battery is max 5A*.

* See diagram 1

SPECIFICATIONS	
PSU type:	A (EPS - External Power Source)
Mains supply:	176÷264V AC
Current consumption:	1,5A@230VAC max.
PSU's power:	270W max.
Efficiency:	85%
Output voltage:	44V÷54V DC – buffer operation 38V÷54V DC – battery operation
The adjustment range of the output voltage:	48÷56V DC
Output current $t_{AMB}<30^{\circ}C$	16 x 0,3A + 0,5A battery charge – see diagram 1
Output current $t_{AMB}=40^{\circ}C$	16 x 0,2A + 0,5A battery charge – see diagram 1
Ripple voltage	150 mV p-p max.
PSU current consumption	150mA
Battery charging current	0,5A
Short-circuit protection SCP	105% ÷ 150% of PSU power, electronic current limiting
Overload protection OLP	105% ÷ 150% of PSU power, electronic current limiting
Battery circuit protection SCP and reverse polarity connection	melting fuse
Surge protection	varistor
Overvoltage protection OVP:	>62V (activation requires disconnecting the load or supply for about 20 s.)
Deep discharge battery protection UVP:	U<38V (± 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:	420 x 373 x 181+14 mm (WxHxD)
Net/gross weight:	7,70kg / 8,30kg
Battery housing:	4x17Ah/12V (SLA) max. 415x170x170mm (WxHxD) max
Closing:	Cylindrical screw x 2 (at the front), lock assembly possible
Declarations, warranty	CE, RoHS, 2 year from the production date
Notes:	The enclosure has a 15mm distance from the mounting surface so the cables can be led. Forced cooling – fan. Switch mode power supply: $\Phi 0,63-2,5$ (AWG 22-10) LAN/PoE outputs 1...16: RJ45 8pin TAMPER output: $\Phi 0,8$

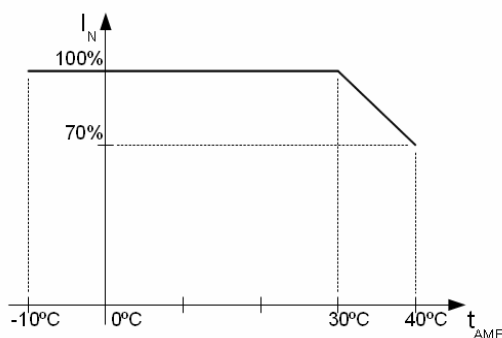


Diagram 1. Maximum permissible output current depending on ambient temperature.