

POE series power supply unit

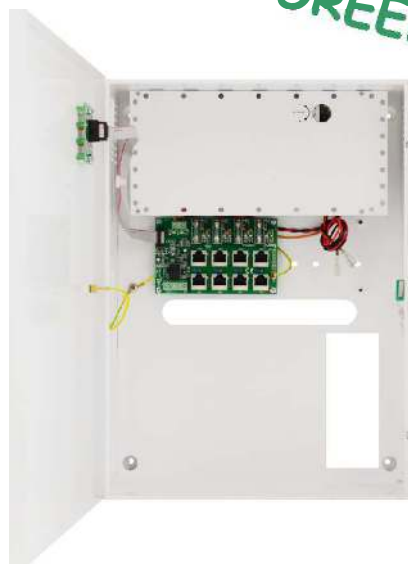
PoE power supply 54V DC for up to 4 IP cameras with battery backup



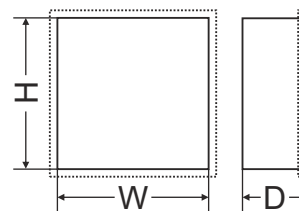
CODE: **POE044812B** v.1.0/1

EN*

TYPE: **PoE 54V/4x0,3A/4x7Ah PoE power supply for up to 4 IP cameras with battery backup**



GREEN POWER CCTV
PoE



PSU features:

- DC 54V uninterruptible power supply to 4 cameras IP
- battery housing: 4x7Ah/12V
- Wide range of AC supply voltage: 176÷264V
- High efficiency: 88%
- battery charging and maintenance control
- deep discharge battery protection (UVP)
- battery charging current: 0,3A
- battery output protection against short circuit and reverse connection
- designed for 10Mbit/s and 100Mbit/s network
- Voltage control at the AUX1 ÷ AUX4 outputs
- FPS technical output – indication of the output fuse activation– relay and OC type
- LED optical indication
- protections:
 - SCP short-circuit protection
 - OVP overvoltage protection
 - Surge protection
 - Antisabotage protection
 - OLP overload protection
- Mounting plate for mounting the network switch - Ethernet Switch / Hub
- warranty – 2 year from the production date

DESCRIPTION

The PSU is designed for supply of up to 4 webcams requiring stabilized voltage of **48V DC(+/-15%)**. The PSU supplies voltage of **54V DC** and total current capacity of: **I=4x0,25A+0,3A Battery charging***. In case of mains power loss, the unit will instantly switch to battery operation. There are 4 power supply outputs, independently protected by melting fuses or PTC polymer fuses. Failure (short circuit) in the output circuit will activate the melting fuse or PTC fuse and disconnect the circuit from DC power (+ U). Fuse failure is indicated by switching off the corresponding LEDs: L1 for AUX1, etc. In addition, the FPS output (hi-Z state) and L_{FPS} LED are activated and the relay contacts change their position. The PSU is housed in a metal enclosure with signaling panel equipped with a microswitch indicating 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 $I = 4x0,25A$. Maximum battery charging current is 0,3A. Total current of the receivers + battery is max 1,2A*(72W).

* See diagram 1

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SPECIFICATIONS	
PSU type:	A (EPS - External Power Source)
Mains supply:	176÷264V AC
Current consumption:	0,8A@230VAC max.
PSU's power:	70W max.
Efficiency:	88%
Output voltage:	44V÷ 54V DC – buffer operation 38V÷ 54V DC – battery operation
The adjustment range of the output voltage:	48÷55V DC
Output current $t_{AMB}<30^{\circ}\text{C}$	4x0,25A – See diagram 1
Output current $t_{AMB}=40^{\circ}\text{C}$	4x0,2A – See diagram 1
Ripple voltage	150mV p-p max.
Battery charging current	0,3A max. @ 4x7Ah ($\pm 5\%$)
Short-circuit protection SCP	PoE MODULE 4 x F 0,5A or 4 x PTC 0,5A (jumper selectable) PSU MODULE 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	4 x varistor
Overvoltage protection OVP:	>62V (automatic return)
Deep discharge battery protection UVP:	$U<38\text{V} (\pm 5\%)$ – disconnecting the battery terminal
Antisabotage protection: - TAMPER output indicating enclosure opening	- microswitch, NC contacts (enclosure closed), 0,5A@50V DC (max.)
Technical outputs: - FPS technical output indicating output fuse activation	- OC type, 50mA max. Normal operation: L state (0V), failure: H state (hi-Z), (automatic return once the normal operation is restored) - relay type: 1A@ 30VDC/50VAC, delay time: approximately 10 seconds
Optical indication of operation:	Yes –LED lights
Operating conditions:	2nd environmental class, $-10^{\circ}\text{C}\div 40^{\circ}\text{C}$
Enclosure:	DC01 steel plate, 1,0mm, color RAL 9003
Dimensions:	300 x 407 x 126 mm (WxHxD)
Net/gross weight:	4,6kg / 4,9kg
Battery housing:	4x7Ah/12V (SLA) max. 250x165x105mm (WxHxD) max
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 15mm distance from the mounting surface so the cables can be led. Convection cooling. Switch mode power supply: $\Phi 0,4-2,5$ (AWG 26-10) PoE module: $\Phi 0,5-2,1$ (AWG 24-12) AUX1...4 outputs: RJ45 8pin TAMPER output: $\Phi 0,8$

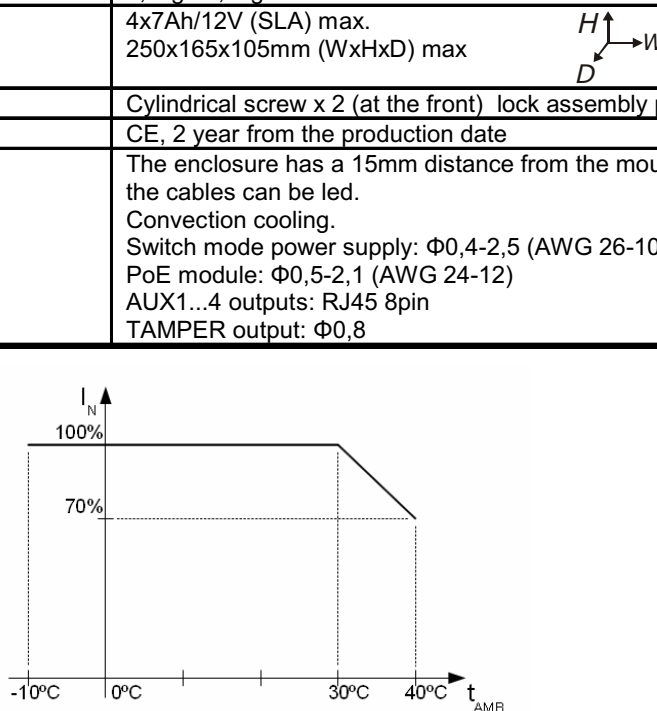


Diagram 1. Maximum permissible output current depending on ambient temperature.