

# PSUPS series power supply unit

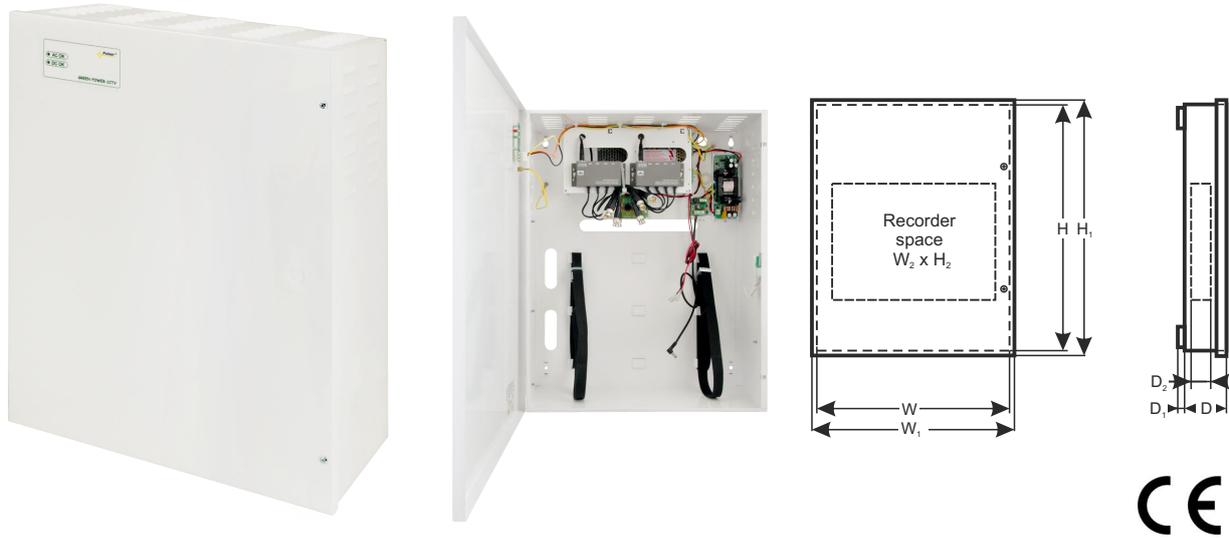
Buffer power supply for up to 8 HD cameras and DVR with recorder space + transmitters



CODE: **PSUPS 10A12CRT** v.1.0/II

EN\*\*

TYPE: **PSUPS 13,8V/12V/10A/17Ah** Buffer power supply for up to 8 HD cameras and DVR with recorder space + transmitters.



## Features:

- DC 13,8V uninterruptible power supply of HD cameras
- DC 12V uninterruptible power supply of the recorder
- fitting battery 17Ah/12V
- recorder space 380x320x65
- wide range of mains supply AC 176÷264V
- high efficiency 80%
- 8 RJ45 0,75A outputs supplying HD and digital cameras
- 12V/4A output dedicated to supply the recorder
- battery charge and maintenance control
- deep discharge battery protection (UVP)
- battery charging current 1A
- Approximate backup time: 1h 30min
- battery output protection against short circuit and reverse polarity connection
- LED indication
- protections:
  - SCP short-circuit protection
  - OLP overload protection
  - OVP over voltage protection
  - surge protection
  - against sabotage
- warranty – 2 years from the production date

## DESCRIPTION

A buffer PSU is intended for an uninterrupted supply to CCTV system devices requiring stabilized voltage of **12V DC (+/-15%)**. The PSU has two circuits: first **1x4A / 12V DC** for supplying the recorder and **8x0,75A / 13,8V DC** to power the cameras through the transmitter using the RJ45 connector and UTP cable. Current efficiency of the PSU amounts to:

**Output current 8x0,75A + 4A recorder + 1A battery charging \***

**Total current of the receivers + battery 11A\* max.**

In case of a mains power loss 230V a battery back-up is activated immediately.

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 unit is placed in a metal enclosure (color RAL 9003) with space for 17Ah / 12V batteries. The enclosure is equipped with a micro-switch indicating unwanted opening of the door (faceplate).

\* See chart 1

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SPECIFICATIONS	
PSU type	A (EPS - External Power Source)
Mains supply	176÷264V AC / 50Hz
Current consumption	1,3A@230V AC
PSU's power	150W
Efficiency	80%
Output voltage – strips fuse base 8x	11V ÷ 13,8V DC – buffer operation 9,5V ÷ 13,8V DC – battery-assisted operation
Output voltage – recorder	<b>12V DC</b> maintained regardless of the state of battery charge
<b>Output current <math>t_{AMB}&lt;30^{\circ}\text{C}</math></b>	<b>8x0,75A + 4A recorder + 1A battery charging*</b> <b>Total current of the receivers + battery 11A* max.</b> <b>* see chart 1</b>
Output current $t_{AMB}=40^{\circ}\text{C}$	8x0,3A + 4A recorder + 1A battery charging * Total current of the receivers + battery 7,7A*max. * see chart 1
Output voltage adjustment range	12÷14V DC
Ripple voltage	120mV p-p max.
PSU current consumption	0,2A
Battery charging current	1A
Approximate backup time	1h 30min
Short-circuit protection SCP - circuit of cameras	F5A melting fuses in the fuse module
Short-circuit protection SCP - circuit of recorder	F5A melting fuse in the filter
Overload protection OLP	105% ÷ 150% of the PSU power, automatic recovery
Battery circuit protection SCP and reverse polarity connection	glass fuse 15A
Surge protection	varistors
Over voltage protection OVP	>16V (automatic recovery)
Deep discharge protection UVP	U<9,5V ( $\pm 5\%$ ) – disconnection of battery terminal
Sabotage protection: - TAMPER output indicating enclosure opening	- micro-switches, NC contacts (enclosure closed), 0,5A@50V DC (max.)
Optical indication: front panel of the PSU - AC OK.; LED indicating the AC power status - AUX OK.; LED indicating the DC supply at the PSU output	- red, normal status – on, failure: off - green, normal status – on, failure: off
Operating conditions	2nd environmental class, $-10^{\circ}\text{C} \div +40^{\circ}\text{C}$
Enclosure	Steel plate DC01 1,0mm, RAL 9003
Dimensions	W=420, H=535, D+D <sub>1</sub> =193+14 [+/- 2mm] W <sub>1</sub> =425, H <sub>1</sub> =540 [+/- 2mm]
The dimensions of the recorder compartment	W <sub>2</sub> =380, H <sub>2</sub> =320, D <sub>2</sub> =65 [+/- 2mm]
The dimensions of the battery compartment	180 x 170 x 80 mm (WxHxD) max
Net/gross weight	10,5 / 11,0 kg
Closing	Cheese head screw x 2 (at the front), lock assembly possible
Deklarations, warranty	CE, 2 year from the production date
Notes	The enclosure does not adjoin the assembly surface so that cables can be led.

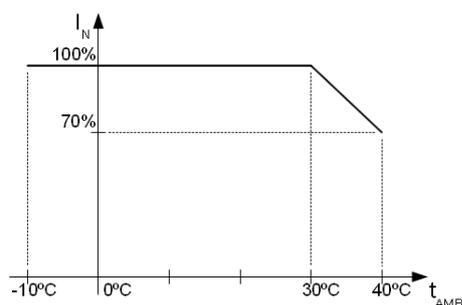


Chart 1. Acceptable output current from the PSU depending on ambient temperature.