## **RACK POWER CCTV series power supply unit**

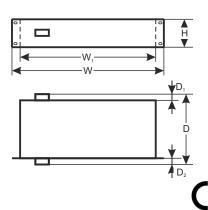
RACK mounted buffer power supply for up to 16 cameras and recorder



CODE: RUPS1612RP v.1.0/III

TYPE: RUPS 13,8V/12V/20A/PTC mounted buffer power supply for up to 16 cameras and recorder.





## Features:

- DC 13,8V/16x0,75A uninterruptible power supply for powering HD cameras ( $\Sigma$  I =12A max.)
- DC 12V/4A uninterruptible power supply of the recorder
- 16 outputs to cameras independently protected with 1A polymer fuses
- the output for the recorder is protected with the 4A polymer fuse
- high efficiency 82%
- battery charging and maintenance control
- excessive discharging (UVP) protection
- battery output protection against short circuit and reverse connection
- battery charge current: 2A (batteries 1x17Ah / 1x28Ah / 1x40A / 1x65Ah)
- control of voltage presence at the AUX1
   + AUX16 outputs DVR
- Approximate backup time: 4h 30min

- · acoustic indication of failure
- LED optical indication: AC, DC, TEMP, LoB, ALARM, AUX1 ÷ AUX16, DVR
- the ALARM technical output of collective failure –relay type, activated by:
  - 230V AC power loss
  - low voltage of the PSU (<11,5V)</li>
  - activation of the output fuse in the camera power supply circuit
  - activation of the output fuse in the recorder power supply circuit
  - too high temperature of the PSU (>70°C)
  - the PSU failure
- protections:
  - SCP short-circuit protection
  - OVP overvoltage protection
  - overvoltage protection
  - overload protection OLP
- forced cooling (fan)
- warranty 2 year from the production date

## **DESCRIPTION**

The RUPS1612RP buffer power supply unit is designed for uninterrupted power supply of up to 16 HD cameras requiring stabilized voltage of 12V DC (+/- 15%). The PSU has two circuits: 1x4A / 12V DC for supplying the recorder and 16x0,75A / 13,8V DC for both cameras. Current efficiency of the PSU amounts to:

Output current 16x0,75A + 4A recorder + 2A battery charge Total device current + battery: 18A max.

In case of power decay, a battery back-up is activated immediately.

The approximate backup time is given assuming that all output ports are used (using typical devices and 65Ah batteria). 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 PSU is fitted with 16 outputs protected independently with polymer fuse PTC 1A and the output for the recorder is protected with the 4A polymer fuse. The power supply is fitted with the ALARM output of collective failure. In case of failure, relay contacts are switched automatically, which is accompanied by acoustic and optical indication (the corresponding led goes on). The power supply construction is based on the switch mode PSU with high energy efficiency and is located in an enclosure adapted for mounting in standard **RACK** 19" cabinets.

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SPECIFICATIONS	
PSU type:	A (EPS - External Power Source)
Mains supply	230V AC (-15%+10%) / 50Hz
Current up to	1,3A@230V AC max.
Supply power	241W max.
Efficiency	82%
Output voltage AUX1÷AUX16 -	11V ÷ 13,8V DC – buffer operation
cameras	9,5V ÷ 13,8V DC – battery-assisted operation
Output voltage DVR - recorder	12V DC – maintained regardless of the state of battery charge
Output current	16 x 0,75A + 4A recorder + 2A battery charge
Ripple	120 mV p-p max.
Battery charge current (batteries 1x17Ah/ 1x28Ah/ 1x40Ah/ 1x65Ah)	2A max. (+/-5%)
Approximate backup time	4h 30min
Short-circuit protection SCP	cameras: 16 x PTC 1A, polymer fuse recorder: 1 x F 4A, glass fuse
Overload protection OLP Current consumption by PSU systems	105% ÷ 150% of the PSU power, automatic return 0,33A
Overvoltage protection OVP	>16V (activation requires disconnecting the load or supply for about 20s.)
Battery circuit protection SCP and reverse polarity connection	glass fuse 30A
Surge protection	varistors
Excessive discharge protection UVP	U<9,5V (+/-5%) – disconnect of connection battery
Optical indication of operation:	LED: AC, DC, TEMP, LoB, ALARM, AUX1÷AUX16
Acoustic operation indication:	Piezoelectric indicator ~75dB/0,3m
Operating conditions	2nd environmental class, -10°C ÷ +45°C
Enclosure	Steel plate RAL 9005, black
Mounting dimensions	W=19", H=2U, D=267
Dimensions	W=482, W <sub>1</sub> =442, H=88, D=267, D <sub>1</sub> =32, D <sub>2</sub> =10 [+/- 2mm]
Net weight	6,2 / 6,6 kg
Fixation	four-point butt mounting to RACK profiles – the set include 4 M6 screws + cage nuts
Declarations, warranty	CE, 2 year from the production date
Notes	Forced cooling (fan). 230V AC input: the IEC C14 socket with a fuse, power cable 2m (included) Outputs: ALARM, AUX1÷AUX16: Φ0,5-2,1 (AWG 24-12) 0,5-1,5mm <sup>2</sup> Output DVR: Φ0,5-2,1 (AWG 24-12) 0,5-1,5mm <sup>2</sup> , power cable 2m (included) Battery output BAT: 6,3F-2,5