PSUPS series power supply unit

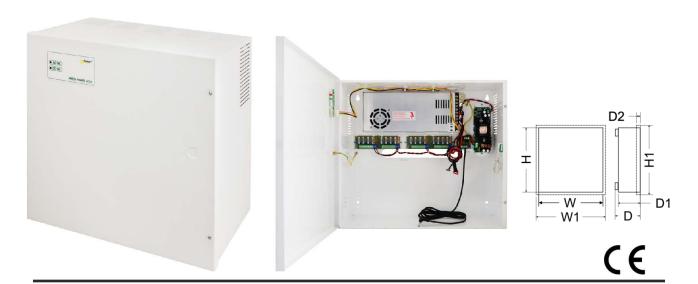
Power supply for 16 cameras and recorder



CODE: PSUPS 20A12E v.1.2/III

TYPE:

PSUPS 13.8V/12V/20A/65Ah Buffer power supply for 16 cameras and recorder



Features:

- DC 13,8V uninterruptible power supply of cameras
- DC 12V uninterruptible power supply of the recorder
- fitting battery 65Ah/12V
- wide range of mains supply AC 176÷264V
- built-in power factor correction system (PFC)
- high efficiency 85%
- 16 outputs protected by 1A glass fuses for powering analog cameras
- 12V/5A output dedicated to supply the recorder
- battery charge and maintenance control
- deep discharge battery protection (UVP)

- battery charging current 2A/4A/8A jumper selectable
- battery output protection against short circuit and reverse polarity connection
- LED indication
- protections:
 - SCP short-circuit protection
 - OLP overload protection
 - OVP over voltage protection
 - OHP overheat 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 1x5A/12VDC for supplying the recorder and 16x0,8A/13,8V DC for both cameras. Current efficiency of the PSU amounts to:

- 1. Output current 16x0,8A + 5A recorder + 2A battery charging *
- 2. Output current 16x0,7A + 5A recorder + 4A battery charging *
- 3. Output current 16x0,4A + 5A recorder + 8A battery charging * Total current of the receivers + battery 20A* max.

In case of a mains power loss 230V a battery back-up is activated immediately. The PSU is mounted in a metal enclosure (RAL 9003 colour) that accommodates a 65Ah/12V battery. 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	1,5A @230V AC
PSU's power	264W
Efficiency	85%
Power factor PF	>0,95 @230V AC
Output voltage – strips fuse base 16x	11V ÷ 13,8V DC – buffer operation
Carpat Voltage Carpo tace bace tox	9,5V ÷ 13,8V DC – battery-assisted operation
Output voltage – recorder	12V DC maintained regardless of the state of battery charge
Output current t _{AMB} <30°C	16x0,8A + 5A recorder + 2A battery charging*
Sulput surrent tamb to s	16x0,7A + 5A recorder + 4A battery charging*
	16x0,4A + 5A recorder + 8A battery charging *
	Total current of the receivers + battery 20A* max.
	* see chart 1
Output current t _{AMB} =40°C	16x0,4A + 5A recorder + 2A battery charging *
	Total current of the receivers + battery 14A* max.
	* see chart 1
Output voltage adjustment range	12÷14VDC
Ripple voltage	120mV p-p max.
PSU current consumption	230mA
Battery charging current	2A, 4A, 8A jumper selectable
Short-circuit protection SCP	2x STRIP LB8: 16x F 1A glass fuse, STRIP LB1: 1xF 5A
Overload protection OLP	105% ÷ 150% of the PSU power, automatic recovery
Battery circuit protection SCP and reverse polarity connection	glass fuse 30A
Surge protection	varistors
Over voltage protection OVP	>16V (activation requires disconnecting the load or supply for about 20 s.)
Deep discharge protection UVP	U<9,5V (± 5%) – disconnection of battery terminal
Sabotage protection: - TAMPER output indicating enclosure	- micro-switches, NC contacts (enclosure closed),
opening	0,5A@50V DC (max.)
Optical indication: front panel of the PSU - AC OK.; LED indicating the AC power	- red, normal status – on, failure: off
status	
- AUX OK.; LED indicating the DC supply at the PSU output	- green, normal status – on, failure: off
Operating conditions	2nd environmental class, -10 °C÷40 °C
Enclosure	Steel plate DC01 1,2mm, RAL 9003
Dimensions	425 x 375 x 182+15 [mm] (WxHxD)
Net/gross weight	7,70/8,40 kg
Fitting battery	65Ah/12V (SLA) max. <i>H</i> ↑
Training battery	360x175x165mm (WxHxD) max D W
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.
	Forced cooling - built-in fan.

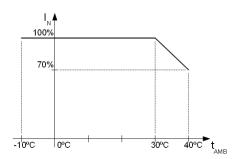


Chart 1. Acceptable output current from the PSU depending on ambient temperature.