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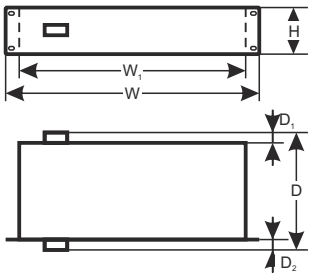
CODE: **RSGUPS108R** v.1.0/I

TYPE: **RSGUPS108R 10-ports switch with buffer power supply for 8 IP cameras and recorder, RACK mounted.**



Features:

- DC 52V uninterruptible power supply of 8 IP cameras
- DC 12V uninterruptible power supply of the recorder
- Switch 10 ports
  8 PoE 10/100/1000Mb/s ports, (1÷8 ports) (data and power supply)
  2 ports 10/100/1000Mb/s (UpLink)
- 30W for each PoE port, supports devices complaint with the IEEE802.3af/at **(PoE+)** standard
- Supports auto-learning and auto-aging of MAC addresses (1K size)
- battery charging and maintenance control
- excessive discharging (UVP) protection
- battery output protection against short circuit and reverse connection
- battery charge current: 1A
  (batteries 2x7Ah / 2x17Ah / 2x28Ah)
- Approximate backup time: 5h 30min
- voltage control at the NVR output
- acoustic indication of failure
- LED optical indication: AC, DC, TEMP, LoB, ALARM, NVR
- the ALARM technical output of collective failure – relay type, activated by:
  - 230V AC power loss
  - low voltage of the PSU (<23V)
  - no voltage at the power supply output of the recorder
  - too high temperature of the PSU (>70°C)
  - the PSU failure
- protections:
  - SCP short-circuit protection
  - overvoltage protection
  - overload protection OLP
- forced cooling (fan)
- warranty – 2 year from the production date

DESCRIPTION

The **RSGUPS108R** is a complete solution for power supply and battery backup of 8 IP cameras (52VDC power supply) and uninterruptible power supply of the DVR (12VDC power supply) in **RACK** 19" standard.

The main elements of this system include:
- 10 ports PoE switch
- buffer power supply 27,6V unit which can accommodate two 12V batteries
- a converter (DC/DC52230) increasing the voltage to 52VDC (supply of the PoE switch)
- a buck converter (step-down converter) (DC/DC50SD) lowering voltage to 12VDC (recorder power supply).

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

The approximate backup time is given assuming that all output ports are used (using typical devices and 28Ah 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".

Automatic detection of any devices powered in the PoE/PoE+ standard is enabled at the 1 – 8 ports of the switch. The UpLink port is used for connection of another network device via RJ45 connector. The LED lights at the front panel indicate the operating status of the device.

The switch is fitted with the ALARM technical output of collective failure. In the case of failure, a LED light is activated, which is accompanied by switching of relay contacts and acoustic indication.

The PoE technology ensures a network connection and reduces installation costs by eliminating the need to supply a separate power cable for each device. This method allows supplying other network devices, such as IP phone, wireless access point or router.

RSGUPS108R 10-ports switch with buffer power supply for 8 IP cameras and recorder, RACK mounted

PARAMETERS OF THE SWITCH

Ports	10 10/100/1000Mb/s ports (8 x PoE + 2 x UP LINK) with connection speed auto-negotiation and MDI/MDIX Auto Cross)
PoE power supply	IEEE802.3af/at (1÷8 ports), 52VDC / 30W at each port *
Protocols, Standards	IEEE802.3, 802.3u, 802.3x CSMA/CD, TCP/IP
Forwarding rate	10BASE-T: 14880pps/port
	100BASE-TX: 148800pps/port
Bandwidth	1,6Gbps
Transmission method	Store-and-Forward
Optical indication of operation	Switch power supply; Link/Act; PoE Status

* The given value of 30W per port is the maximum value. The total power consumption should not exceed 120W when all PoE ports are being used.

ELECTRICAL PARAMETERS

Mains supply	230V AC (-15%/+10%) 50Hz
Current up to	1,3A max. / 230VAC
Supply power	196W
Output voltage at the PoE ports **Output voltage the recorder – NVR**	52V DC – maintained regardless of the state of battery charge 12V DC – maintained regardless of the state of battery charge
The output current at the PoE ports	8 x 0,6A ΣI=2,3A (max.)
Output current of the recorder – NVR	4A
Ripple voltage – output of the NVR recorder	150 mV p-p max.
Battery charge current (batteries 2x7Ah / 2x17Ah / 2x28Ah, connect batteries in series)	1A max. (+/-5%)
Approximate backup time	5h 30min
Short-circuit protection SCP and overload protection OLP	105% ÷ 150% of the PSU power, manual restart (failure requires the disconnection of the DC output)
PSU current consumption	300mA/27,6V
Battery circuit protection SCP and reverse polarity connection	melting fuse
Excessive discharge protection UVP	U<19V (+/-5%) – disconnect of connection battery
Optical indication of operation	LED: AC, DC, TEMP, LoB, ALARM, LINK, PoE
Acoustic operation indication:	Piezoelectric indicator ~75dB/0,3m
The ALARM technical output of collective failure	Relay type: 1A@ 30VDC/50VAC
The F_{MAINS} fuse in the 230V power supply circuit	T 6,3A

MECHANICAL PARAMETERS

Mounting dimensions	W=19”, H=2U, D=307
Dimensions	W=482, W_1=442, H=88, D=307, D_1=32, D_2=10 [+/- 2mm]
Fixation	four-point butt mounting to RACK profiles – the set include 4 M6 screws + cage nuts
Net / gross weight	7,1kg / 7,6kg
Enclosure	Steel plate RAL 9005, black
Connectors	**230V AC** input: the IEC C14 socket with a fuse, power cable 2m (included) Technical output **ALARM**: Φ0,5-2,1 (AWG 24-12) 0,5-1,5mm^2 Power supply output of the **NVR** recorder: Φ0,5-2,1 (AWG 24-12) 0,5-1,5mm^2, power cord 2m, terminated with the DC 5,5/2,1 plug (included) Outputs of cameras **PoE**: sockets RJ45 8P8C Data output of the **UPLINK** recorder: RJ45 8P8C jack Battery output **BAT**: 6,3F-2,5
Notes	Forced cooling (fan).