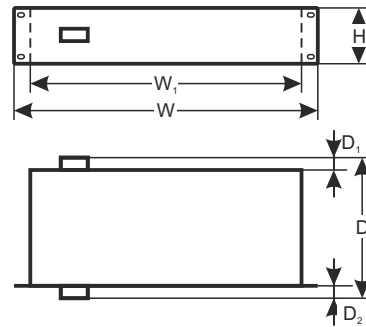


CODE: **RSFUPS108R** v.1.2/IV
TYPE: **RSFUPS108R 10-ports switch with buffer power supply for 8 IP cameras and recorder, RACK mounted**

EN*



Features:

- DC 52 V uninterruptible power supply of 8 IP cameras
- DC 12 V uninterruptible power supply of the recorder
- Switch 10 ports
8 PoE 10/100 Mb/s ports, (1+8 ports) (data and power supply)
2 ports 10/100/1000 Mb/s (ports G1/TP, G2/TP) (UpLink)
2 ports 10/100/1000 Mb/s SFP (G1/SFP, G2/SFP ports)
- 30 W for each PoE port, supports devices compliant 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: 1 A
(batteries 2x7 Ah / 2x17 Ah / 2x28 Ah)
- Approximate backup time: 5 h 30 min
- 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:
 - 230 V power loss
 - low voltage of the PSU (<23 V)
 - 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 **RSFUPS108R** is a complete solution for power supply and battery backup of 8 IP cameras (52 V DC power supply) and uninterruptible power supply of the DVR (12 V DC power supply) in **RACK 19"** standard.

The main elements of this system include:

- 10 port PoE switch
- buffer power supply 27,6 V unit which can accommodate two 12 V batteries
- a converter (DC/DC52230) increasing the voltage to 52 V DC (supply of the PoE switch)
- a buck converter (step-down converter) (DC/DC50SD) lowering voltage to 12 V DC (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 28 Ah 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 G1/TP, G2/TP ports is used for connection of another network device via RJ45 connector. The switch is fitted with SFP slots (marked as G1/SFP and G2/SFP); the use of fiber optic module (GBIC) allows fiber optic transmission. 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.

PARAMETERS OF THE SWITCH

Ports	8 x PoE (10/100 Mb/s) (RJ-45) 2 x UPLINK (10/100/1000 Mb/s) (RJ-45) 2 x UPLINK (10/100/1000 Mb/s) (SFP) with connection speed auto-negotiation and MDI/MDIX Auto Cross)
PoE power supply	IEEE802.3af/at (1+8 ports), 52 V DC / 30 W at each port *
Protocols, Standards	IEEE802.3, 802.3u, 802.3x CSMA/CD, TCP/IP
Forwarding rate	10BASE-T: 14880 pps/port 100BASE-TX: 148800 pps/port
Bandwidth	1,6 Gbps
Transmission method	Store-and-Forward
Optical indication of operation	Switch power supply; Link/Act; PoE Status

* The given value of 30 W per port is the maximum value. The total power consumption should not exceed 120 W.

ELECTRICAL PARAMETERS

Mains supply	~230 V; 50 Hz
Current up to	1,3 A
Supply power	196 W
Output voltage at the PoE ports	52 V DC – maintained regardless of the state of battery charge
Output voltage the recorder – NVR	12 V DC – maintained regardless of the state of battery charge
The output current at the PoE ports	8 x 0,6 A $\Sigma I=2,3$ A (max.)
Output current of the recorder – NVR	4 A
Ripple voltage – output of the NVR recorder	150 mV p-p max.
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	300 mA/27,6 V
Battery charge current (batteries 2x7 Ah / 2x17 Ah / 2x28 Ah, connect batteries in series)	1 A max. (+/- 5 %)
Approximate backup time	5 h 30 min
Battery circuit protection SCP and reverse polarity connection	melting fuse
Excessive discharge protection UVP	U<19 V (+/- 5 %) – disconnect of connection battery
Optical indication of operation	LED: AC, DC, TEMP, LoB, ALARM, LINK, PoE
Acoustic operation indication:	Piezoelectric indicator ~75 dB/0,3 m
The ALARM technical output of collective failure	Relay type: 1 A@ 30 V DC/50 V
The F _{MAINS} fuse in the 230 V power supply circuit	T 6,3 A

MECHANICAL PARAMETERS

Mounting dimensions	W=19", H=2U, D=368
Dimensions	W=482, W ₁ =442, H=88, D=368, D ₁ =32, D ₂ =10 [+/- 2 mm]
Fixation	four-point butt mounting to RACK profiles – the set include 4 M6 screws + cage nuts
Net / gross weight	8,1kg / 8,7kg
Enclosure	Steel plate RAL 9005, black
Connectors	230 V AC input: the IEC C14 socket with a fuse, power cable 2m (included) Technical output ALARM : $\Phi 0,5-2,1$ (AWG 24-12) 0,5-1,5 mm ² Power supply output of the NVR recorder: $\Phi 0,5-2,1$ (AWG 24-12) 0,5-1,5 mm 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).