

CODE: **RSUPS54R** v.1.0/III

EN\*

TYPE: **5-port switch with buffer power supply for 4 IP cameras and recorder, RACK mounted.**



### Features:

- DC 48V uninterruptible power supply of 4 IP cameras
- DC 12V uninterruptible power supply of the recorder
- 5 10/100 Mb/s ports
- 4 PoE ports (data transfer and power supply)
- 15,4W for each PoE port, supports devices compliant with the IEEE802.3af standard
- Supports auto-learning and auto-aging of MAC addresses (1K size)
- wide range of mains supply AC: 176÷264V AC
- battery charging and maintenance control
- excessive discharging (UVP) protection
- battery output protection against short circuit and reverse connection
- battery charge current: 0,5A (batteries 2x7Ah / 2x17Ah)
- 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 **RSUPS54R** is a complete solution for power supply and battery backup of 4 IP cameras (48VDC power supply) in **RACK** 19" standard.

The main elements of this system include:

- 5 port PoE switch
- buffer power supply 27,6V unit which can accommodate two 12V batteries
- a converter (DC/DC48125) increasing the voltage to 48VDC (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. Automatic detection of any devices powered in the PoE standard is enabled at the 1 – 4 ports of the switch. The UPLINK port is used to connect another network device. 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

<b>Ports</b>	5 10/100Mb/s ports (4 x PoE + 1 x UPLINK) with connection speed auto-negotiation and MDI/MDIX Auto Cross)
<b>PoE power supply</b>	IEEE 802.3af (1÷4 ports), 48VDC / 15,4W at each port *
<b>Protocols, Standards</b>	IEEE802.3, 802.3u, 802.3x CSMA/CD, TCP/IP
<b>Forwarding rate</b>	10BASE-T: 14880pps/port 100BASE-TX: 148800pps/port
<b>Bandwidth</b>	1,6Gbps
<b>Transmission method</b>	Store-and-Forward
<b>Optical indication of operation</b>	Switch power supply; Link/Act; PoE Status

\* The given value of 15,4W per port is the maximum value. The total power consumption should not exceed 48W when all PoE ports are being used.

### ELECTRICAL PARAMETERS

<b>Mains supply</b>	176÷264V AC
<b>Current up to</b>	1,1A@230VAC max.
<b>Supply power</b>	110W
<b>Output voltage at the PoE ports</b>	48V DC – maintained regardless of the state of battery charge
<b>Output voltage the recorder – NVR</b>	12V DC – maintained regardless of the state of battery charge
<b>The output current at the PoE ports</b>	4 x 0,3A $\Sigma I=1A$ (max.)
<b>Output current of the recorder – NVR</b>	4A
<b>Ripple voltage – output of the NVR recorder</b>	150 mV p-p max.
<b>Short-circuit protection SCP and overload protection OLP</b>	105% ÷ 150% of the PSU power, manual restart (failure requires the disconnection of the DC output)
<b>PSU current consumption</b>	0,2A
<b>Battery charge current (batteries 2x7Ah / 2x17Ah, connect batteries in series)</b>	0,5A max. (+/-5%)
<b>Battery circuit protection SCP and reverse polarity connection</b>	melting fuse
<b>Excessive discharge protection UVP</b>	U<19V (+/-5%) – disconnect of connection battery
<b>Optical indication of operation</b>	LED: AC, DC, NVR, TEMP, LoB, ALARM, LINK, PoE
<b>Acoustic operation indication:</b>	Piezoelectric indicator ~75dB/0,3m
<b>The ALARM technical output of collective failure</b>	Relay type: 1A@ 30VDC/50VAC
<b>The F<sub>MAINS</sub> fuse in the 230V power supply circuit</b>	T 3,15A

### MECHANICAL PARAMETERS

<b>Enclosure dimensions</b>	W=19", H=2U; 482 x 88 x 265 mm (WxHxD)
<b>Fixation</b>	four-point butt mounting to RACK profiles – the set include 4 M6 screws + cage nuts
<b>Net / gross weight</b>	6,40 / 6,90 kg
<b>Enclosure</b>	Steel plate RAL 9005, black
<b>Connectors</b>	<b>230V AC</b> input: the IEC C14 socket with a fuse, power cable 2m (included) Technical output <b>ALARM</b> : $\Phi 0,5-2,1$ (AWG 24-12) 0,5-1,5mm <sup>2</sup> Power supply output of the <b>NVR</b> recorder: $\Phi 0,5-2,1$ (AWG 24-12) 0,5-1,5mm <sup>2</sup> , power cord 2m, terminated with the DC 5,5/2,1 plug (included) Outputs of cameras <b>PoE</b> : sockets RJ45 8P8C Data output of the <b>UPLINK</b> recorder: RJ45 8P8C jack Battery output <b>BAT</b> : 6,3F-2,5
<b>Notes</b>	Forced cooling (fan).