

CODE: **SG108-BR** v.1.1/II
TYPE: **SG108-BR 10-port switch with buffer power supply
for 8 IP cameras and recorder**



Features:

- Uninterruptible power supply of 8 IP cameras (52 V DC)
- Uninterruptible power supply of the recorder (12 V DC)
- Switch 10 ports
8 PoE ports 10/100/1000 Mb/s, (data and power supply)
2 ports 10/100/1000 Mb/s (UpLink)
- 30 W for each PoE port, supports devices compliant with the IEEE802.3af/at (**PoE+**) standard
- Approximate backup time: 3h 15min
- LED indication
- Metal enclosure – color white RAL 9003 with space for two 17 Ah/12 V battery
- Supports auto-learning and auto-aging of MAC addresses (8K size)
- warranty – 2 year from the production date

DESCRIPTION

The SG108-BR is dedicated for uninterruptible power supply of 8 IP cameras (52 V DC power supply) and uninterruptible power supply of the NVR (12 V DC power supply).

The main elements of this system include:

- 10 ports PoE switch
- buffer power supply unit 27,6 V (PSB-30024100) which can accommodate two 17 Ah / 12 V batteries
- a converter (DC/DC52230) increasing the voltage to 52 V DC (supply of the PoE switch)
- a converter (DC/DC50SD) buck to 12 V DC (NVR power supply)

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 17 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 Up Link ports is used for connection of another network device e.g. recorder. The LEDs at the front panel indicate the operation status.

The switch is housed in a metal enclosure (color RAL 9003) which can accommodate a two 17 Ah/12V batteries. The enclosure features a micro switch tamper indicating door opening (front panel). The SG108-BR is fitted with two LEDs on the front panel (red LED – indicates 230 V power supply of the PSU, green LED indicates the presence of DC voltage).

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	10 ports 10/100/1000Mb/s (8 x PoE + 2 x UP LINK) with connection speed auto-negotiation and MDI/MDIX Auto Cross)
PoE power supply	IEEE 802.3af/at (1÷8 ports), 52 V DC / 30 W at each port *
Protocols, Standards	IEEE802.3, 802.3u, 802.3x CSMA/CD, TCP/IP
Bandwidth	16 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	~200-240 V; 50 Hz
Current up to	1,3 A
Supply power	208 W
Output current at the PoE ports (RJ45)	8 x 0,6A $\Sigma I=2,3$ A (max.)
Output voltage at the PoE ports (RJ45)	52 V DC
Output current (recorder)	5 A
Output voltage (recorder)	12 V DC
Ripple voltage – output of the recorder	150 mV
Short-circuit protection SCP and overload protection OLP	105 % ÷ 150 % PSU power, manual restart (the fault requires disconnection of the DC output circuit)
PSU current consumption	300 mA/27,6 V
Battery charge current	1 A max. /2x17 Ah (+/-5%)
Approximate backup time	3h 15 min
Battery circuit protection SCP and reverse polarity connection	melting fuse
Deep discharge battery protection UVP	U<19 V (± 5 %) – disconnection of the batteries
Sabotage protection: - TAMPER output indicating enclosure opening	- microswitch, NC contacts (enclosure closed), 0,5 A@50 V DC (max.)

MECHANICAL PARAMETERS

Dimensions	W=397, H=350, D+D ₁ =92+8 [+/- 2 mm] W ₁ =402, H ₁ =355 [+/- 2 mm]
The dimensions of the battery compartment	370 x 180 x 80 mm (WxHxD) max
Gross/Net weight	5,5 / 5,8 kg
Enclosure	Steel plate, DC01 1,0mm color white RAL 9003
Closing	Cheese head screw x 2 (at the front), (lock assembly possible)
Connectors	Power supply of the cameras: RJ45 socket Power supply for recorder: DC 2,1/5,5 plug Outputs: Φ 0,63-2,50 (AWG 22-10), Battery output BAT: 6,3F-2,5 TAMPER output: wires
Notes	The enclosure does not touch the assembly surface so that cables can be led.