



**SG108**  
**v1.0**  
**SG108 10-port switch for 8 IP cameras**



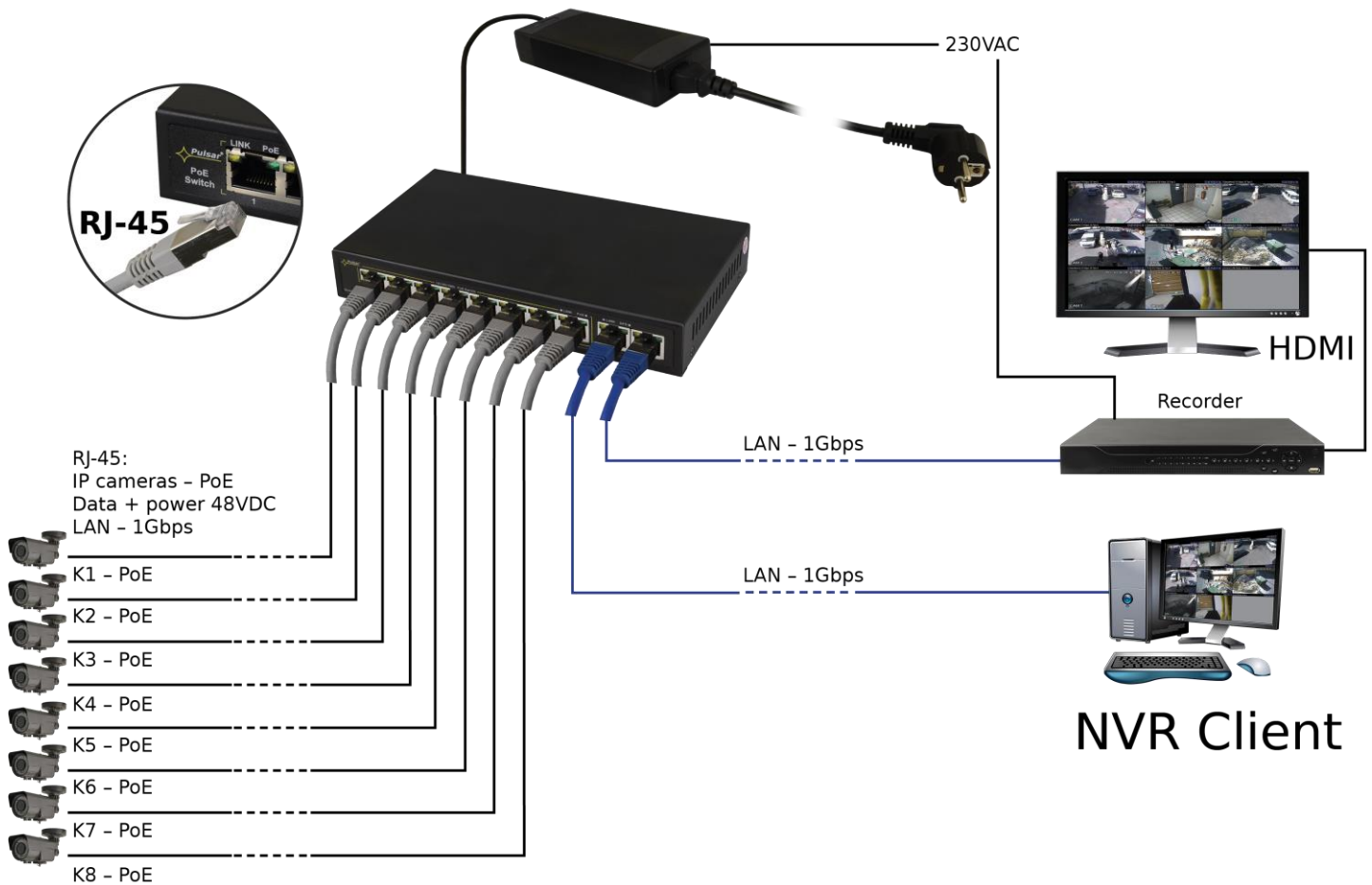
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 Supercedes the edition: -----

**EN**

**Features:**

- Switch 10 ports
- 8 PoE ports 10/100/1000Mb/s (data and power supply)
- 2 ports 10/100/1000Mb/s (UP LINK)
- 30W for each PoE port, supports devices compliant with the IEEE802.3af/at standard
- Supports auto-learning and auto-aging of MAC addresses (8K size)
- LED indication
- The PSD480250 48VDC/2,5A/120W max. power supply desktop type included
- Additional assembly elements
- warranty – 2 year from the production date

**Example of use.**



**1. Technical description.**

**1.1. General description.**

SG108 is a 10-ports PoE switch designed to supply IP cameras operating in IEEE 802.3af/at standard. Automatic detection of any devices powered in the PoE standard is enabled at the 1 – 8 ports of the switch. The UP LINK ports are used for connection of another network device via RJ45 connector. The LEDs at the front panel indicate the operation status (description in the table below).

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.

## 1.2. Block diagram.

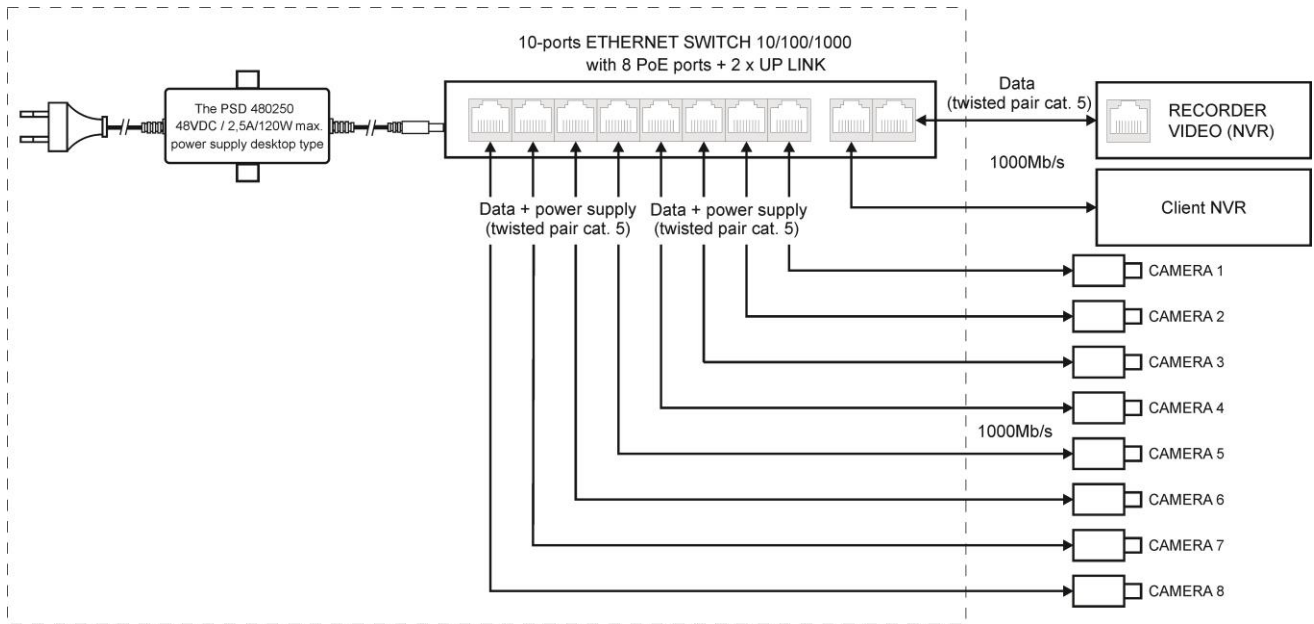


Fig. 1. Block diagram.

## 1.3. Description of components and connectors.

Table 1. (see Fig. 2)

Element no. (Fig. 2)	Description
[1]	8 x PoE port (1÷8)
[2]	2 x UP LINK port
[3]	Power Socket of the DC
[4]	Additional assembly elements

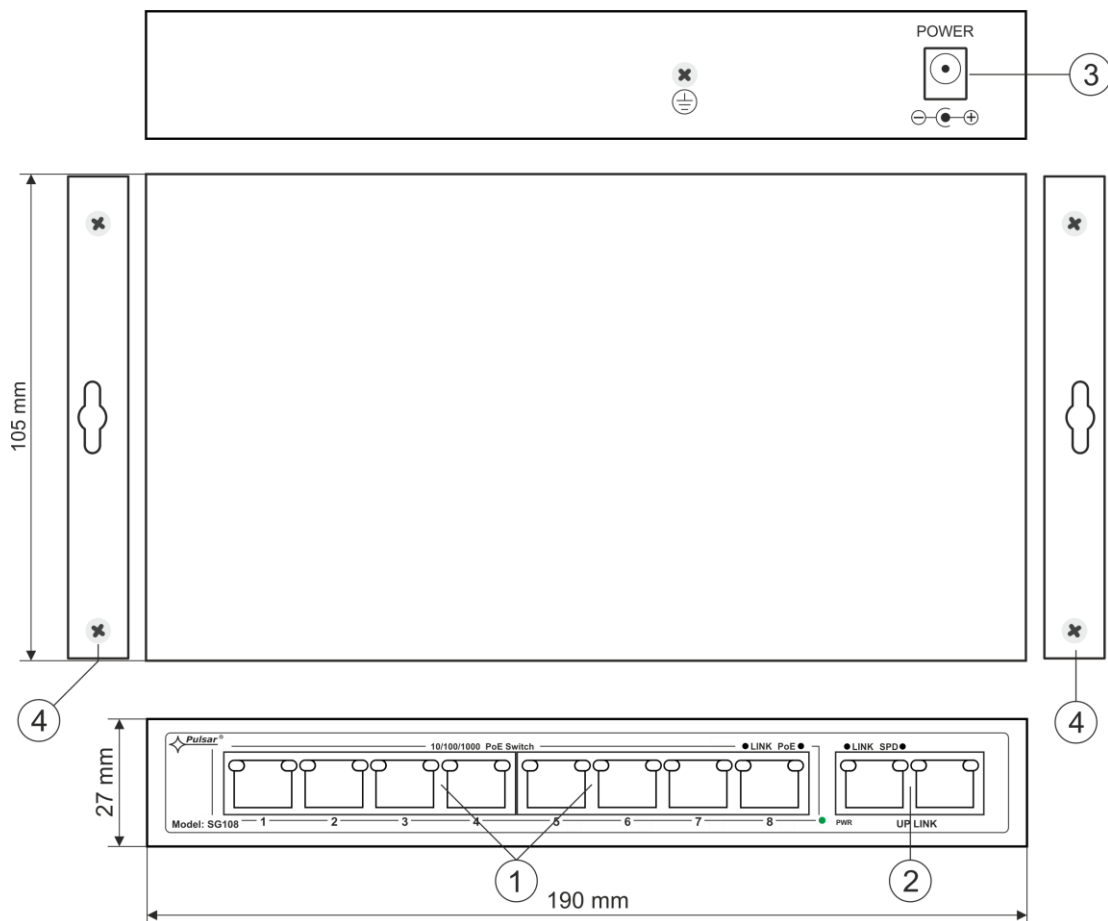
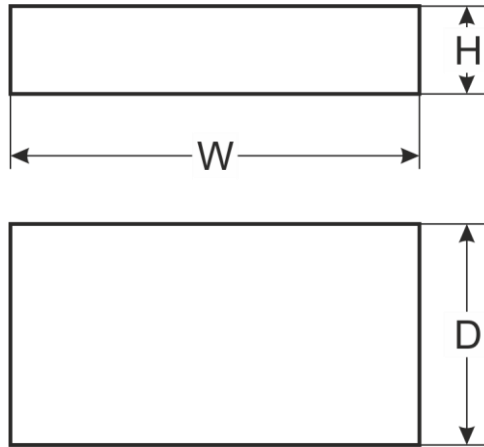


Fig. 2. The view switch'a.

## 1.4. Technical parameters (table 2.)



**Table 2.**

<b>Ports</b>	10 ports 10/100/1000Mb/s (8 x PoE + 2 x UP LINK) with connection speed auto-negotiation and MDI/MDIX Auto Cross
<b>PoE power supply</b>	IEEE 802.3af/at (1÷8 ports), 48VDC / 30W at each port * Used pairs 4/5 (+), 7/8 (-)
<b>Protocols, Standards</b>	IEEE802.3, 802.3u, 802.3x CSMA/CD, TCP/IP
<b>Bandwidth</b>	16Gbps
<b>Transmission method</b>	Store-and-Forward
<b>Optical indication of operation</b>	Switch power supply Link SPD PoE Status
<b>Power supply</b>	90 ÷ 264VAC 50÷60Hz / 2,5A / 230VAC max. the PSD 480250 48VDC/2,5A/120W max. power supply desktop type
<b>Operating conditions</b>	temperature -10°C ÷ 40°C, relative humidity 5% - 90%, no condensation
<b>Dimensions</b>	W=190, H=27, D=105 [+/- 2mm]
<b>Additional equipment</b>	plate to be fixed surface
<b>Net/gross weight</b>	0,54/0,78kg
<b>Protection class</b>	II (second)
<b>Storage temperature</b>	-20°C ÷ 60°C
<b>Declarations</b>	CE

\* The given value of 30W per port is the maximum value. The total power consumption should not exceed 96W when all PoE ports are being used.

## 2. Installation.

### 2.1. Requirements.

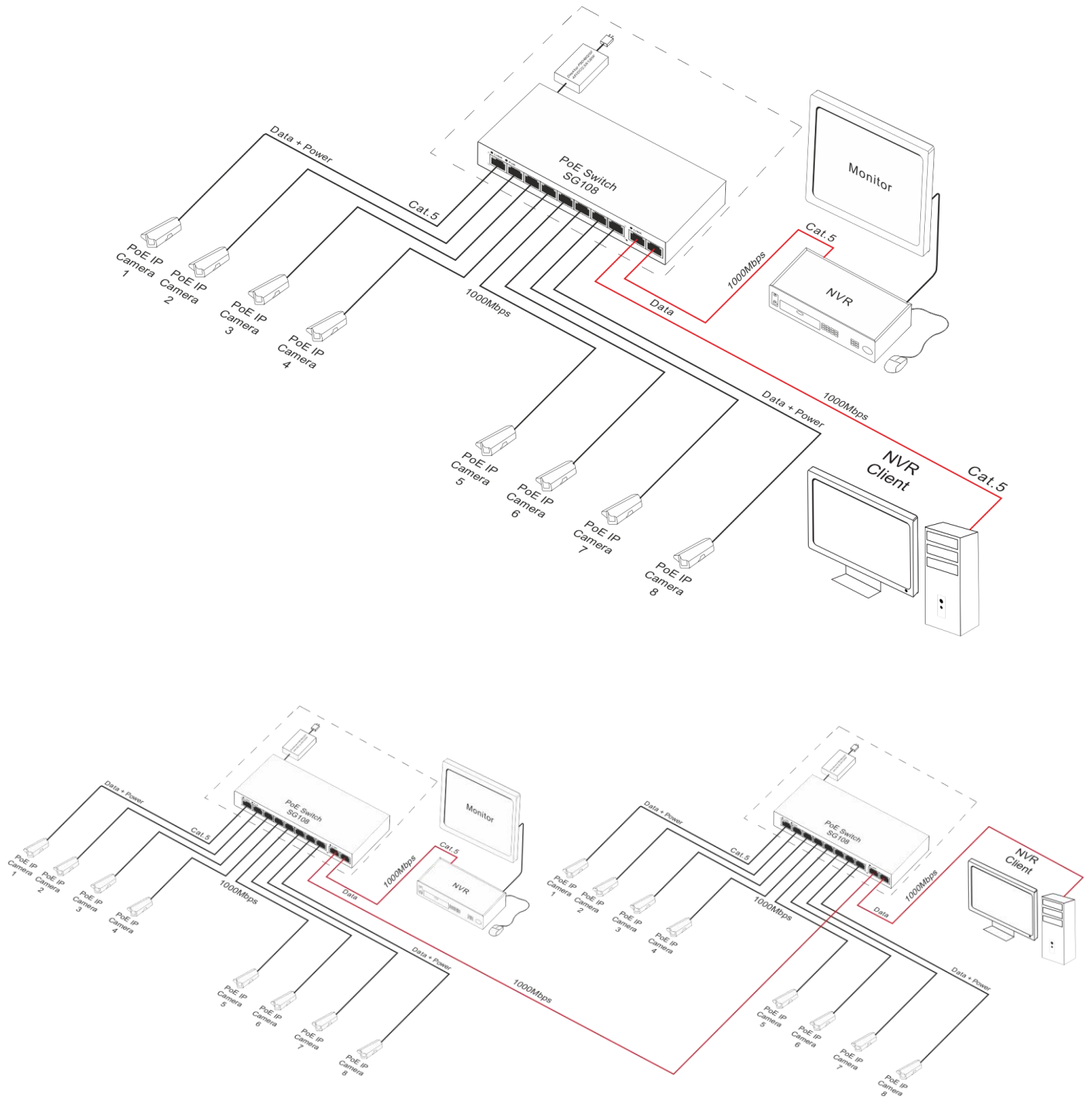
The unit should be mounted in confined spaces, in accordance with the 2nd environmental class, with normal relative humidity (RH=90% maximum, without condensation) and temperature from -10°C to +40°C. Ensure the free flow of air around the unit. The PSU shall work in a vertical position that guarantees sufficient convectional air-flow through ventilating holes of the enclosure.

The switch load balance should be done before installation. The given value of 30W per port is the maximum value referring to a single output. The total power consumption should not exceed 96W when all PoE ports are being used. The increased demand for power is particularly evident in the case of cameras with heaters or infrared illuminators - when launching these features, the power consumption increases rapidly, which may adversely affect the operation of the switch. As the device is designed for a continuous operation and is not equipped with a power-switch, therefore an appropriate overload protection in the power supply circuit should be provided. The electrical system shall be made in accordance with applicable standards and regulations.

### 2.2. Installation procedure.






1. Connect switch to the PSD480250 48VDC power supply unit desktop type.
2. Connect the power supply to the AC 230V socket.
3. Connect the camera wires to the RJ45 connectors (connectors PoE).
4. Check the optical indication of switch operation (see Table 3).

# Connection schemes



### 3. Operation indication (see table 3)

Table 3. Operation indication

OPTICAL INDICATION OF THE SWITCH'S POWER SUPPLY		
<b>GREEN LED LIGHT (Power)</b> Indication of the switch's power supply	<b>PWR</b> 	<b>OFF</b> – no power supply of the switch <b>ON</b> – power supply on, normal operation
OPTICAL INDICATION AT THE PoE PORTS (1÷8)		
<b>GREEN LED LIGHT (PoE)</b> Indication of the PoE power supply at the RJ45 ports		<b>OFF</b> - no power supply at the RJ45 port (the device is not connected or not compliant with the IEEE802.3af/at standard) <b>ON</b> – power supply at the RJ45 port <b>Blinking</b> – short-circuit or output overload
<b>YELLOW LED LIGHT (LINK)</b> The connection status of LAN devices, 10/100/1000Mb/s and data transmission		<b>OFF</b> - no connection <b>ON</b> - the device is connected; 10/100/1000Mb/s <b>Blinking</b> – data transmission
OPTICAL INDICATION AT THE UP LINK PORTS		
<b>GREEN LED LIGHT</b>	 G1 / G2	<b>OFF</b> - no connection / the device is connected 10Mb/s or 100Mb/s <b>ON</b> - the device is connected 1000Mb/s
<b>YELLOW LED LIGHT (LINK)</b> The connection status of LAN devices, 10/100/1000Mb/s and data transmission	 G1 / G2	<b>OFF</b> - no data transmission <b>ON</b> - the device is connected 10/100/1000Mb/s <b>Blinking</b> – data transmission



#### WEEE LABEL

Waste electrical and electronic equipment must not be disposed of with normal household waste. According to the European Union WEEE Directive, waste electrical and electronic equipment should be disposed of separately from normal household waste.

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**Pulsar**

Siedlec 150, 32-744 Łapczyca, Poland  
Tel. (+48) 14-610-19-40, Fax. (+48) 14-610-19-50  
e-mail: [biuro@pulsar.pl](mailto:biuro@pulsar.pl), [sales@pulsar.pl](mailto:sales@pulsar.pl)  
http:// [www.pulsar.pl](http://www.pulsar.pl), [www.zasilacze.pl](http://www.zasilacze.pl)