

### SG32 v1.0 SG32 3-port PoE switch for 2 IP cameras



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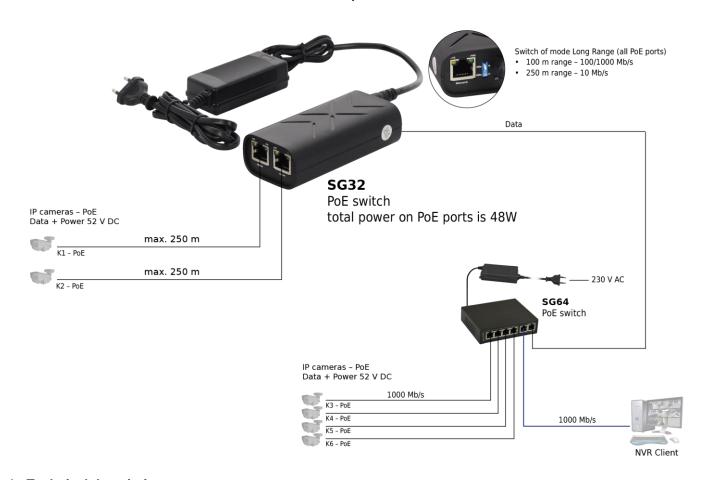
ΕN

### **Features:**

- Switch 3 ports
  - 2 PoE ports 10/100/1000 Mb/s (data transfer and power supply) 1 ports 10/100/1000 Mb/s (Ethernet IN)
- 30 W for each PoE port, supports devices complaint with IEEE802.3af/at (PoE+) standard
- Long Range mode (for 250m)
- Supports auto-learning and auto-aging of MAC addresses (2K size)

- PSD520115 52 V DC/1,15 A/60 W max. power supply desktop type included
- LED indication
- Additional assembly elements
- Warranty 2 years

### Example of use.



## 1. Technical description

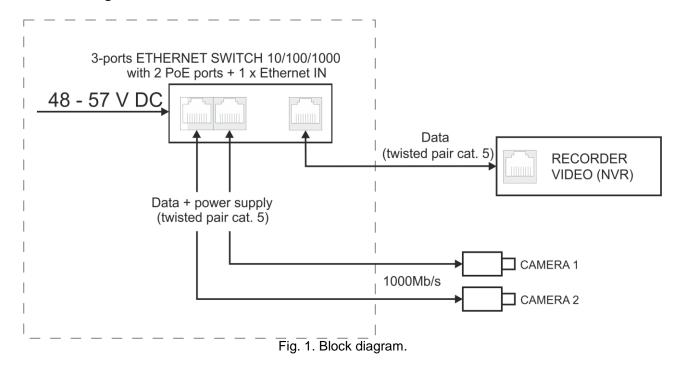
### 1.1. General description.

SG32 is a 3-ports PoE switch designed to supply IP devices operating in IEEE 802.3af/at standard, e.g. cameras IP, video intercoms, Access control etc.

Automatic detection of any devices powered in the PoE/PoE+ standard is enabled at the PoE OUT1/PoE OUT2 ports of the switch. The Port Ethernet IN ports is 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.



# 1.3. Description of components and connectors.

Table 1. (see Fig.2)

| Element no.<br>(Fig. 2) | Description               |
|-------------------------|---------------------------|
| [1]                     | Ethernet IN port          |
| [2]                     | 2 x PoE OUT ports         |
| [3]                     | Power Socket of the DC    |
| [4]                     | Switch of mode Long Range |

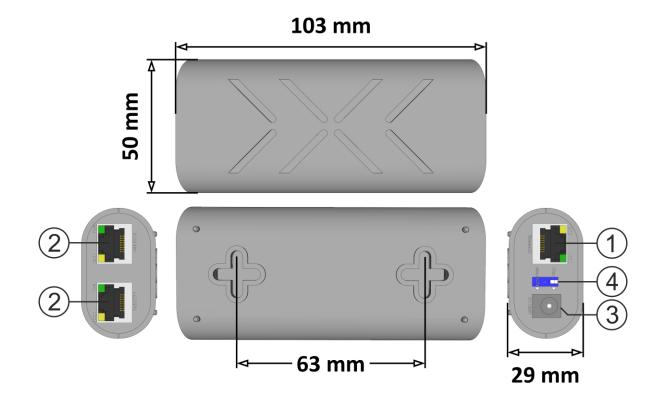


Fig. 2. View of the switch

#### 1.4. Technical parameters.

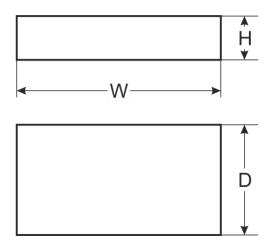


Table 2

| i abit 2.                       |   |  |  |
|---------------------------------|---|--|--|
| Ports                           | 3 x 10/100/1000 Mb/s ports (2 x PoE + 2 x Ethernet IN) with connection speed auto-negotiation and MDI/MDIX Auto Cross |  |  |
| PoE power supply                | IEEE 802.3af/at (1÷2 ports), 52 V DC / 30 W at each port *  |  |  |
| Protocols, Standards            | IEEE802.3, 802.3u, 802.3x CSMA/CD, TCP/IP   |  |  |
| Bandwidth                       | 12 Gb/s   |  |  |
| Transmission method             | Store-and-Forward   |  |  |
| Optical indication of operation | Switch power supply;<br>Link/Act;<br>PoE Status   |  |  |
| Power supply                    | 48-57 V DC; 1,25 A max  |  |  |
| Operating conditions            | Temperature -10°C ÷ +40°C, relative humidity 5% - 90%, no condensation  |  |  |
| Dimensions                      | W=118, H=28, D=95 [+/- 2mm]   |  |  |
| Additional equipment            | plate to be fixed surface   |  |  |
| Net/gross weight                | 0,6 / 0,8 [kg]  |  |  |
| Protection class<br>EN 62368-1  | II (second)   |  |  |
| Storage temperature             | -20°C ÷ +60°C   |  |  |
| Declarations                    | CE  |  |  |
|                                 |   |  |  |

<sup>\*</sup> The given value of 30 W per port is the maximum value. The total power consumption should not exceed 48 W.

### 2. Installation

#### 2.1. Requirements

Unit should be mounted in confined spaces, in accordance, with normal relative humidity (RH=90% maximum, without condensing) 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 load balance should be done before installation Switcha. The given value of 30 W per port is the maximum value referring to a single output. The total power consumption should not exceed 48 W. 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. 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. Long Range mode

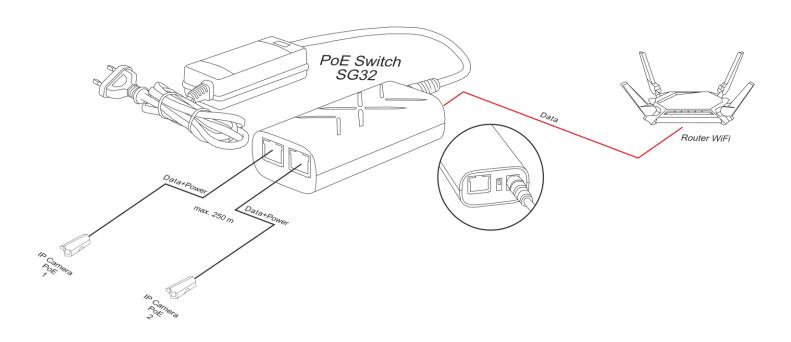
Switch enables operation in two modes: standard and extended range. When the Long Range switch is in 100m position (see Fig. 2), PoE ports operate at 1000 Mb/s up to 100 meters. After switching to 250m position, range is increased to 250 meters and speed is reduced to 10 Mb/s. In both modes, the Ethernet IN port speed is 1000 Mb/s.

Note: Changing the modes requires a power restart!

## 2.3. Installation procedure

- 1. Connect switch to power supply unit, paying attention to polarization and other parameters.
- 2. Connect the power supply to the 230 V socket.
- 3. Connect the camera wires to the RJ45 connectors (PoE connectors).
- 4. Check the optical indication of switch operation (see Table 3).

### **Connection schemes:**



# 3. Operation indication.

**Table 3. Operation indication** 

# OPTICAL INDICATION AT THE POE PORTS

| GREEN LED LIGHT (PoE)<br>Indication of the PoE power<br>supply at the RJ45 ports                     | OFF - no power supply at the RJ45 port (the device is not connected or not compliant with the IEEE802.3af/at standard) ON - supply at the RJ45 port Blinking - short-circuit or output overload |
|--|---|
| YELLOW LED LIGHT (LINK) The connection status of LAN devices, 10/100/1000 Mb/s and data transmission | OFF - no connection ON - the device is connected; 10/100/1000 Mb/s Blinking - data transmission   |

## OPTICAL INDICATION AT THE ETHERNET IN PORT

| GREEN LED LIGHT  |  | OFF - no voltage ON - switch operates properly  |  |
|--|--|---|--|
| YELLOW LED LIGHT (LINK) The connection status of LAN devices, 10/100/1000 Mb/s and data transmission |  | OFF - no data transmission ON - the device is connected 10/100/1000 Mb/s Blinking - 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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