

## Features:

- 10 ports optical switch: 2 ports 10/100/1000Mb/s RJ45
- Supports auto-learning and auto-aging of MAC addresses (8K size)

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8 \text { SFP ports } 10 / 100 / 1000 \mathrm{Mb} / \mathrm{s}
$$

- Built-in switch mode power supply PSD12020 12 V DC
- Additional mounting elements
- LED indication
- warranty - 2 year from the production date


## Example of use.



## 1. Technical description

### 1.1. General description.

SFG10F8 is 10-port optical switch designed for data transmission over Ethernet via fiber optics and UTP cables. Cat 5e. Switch has 8 SFP sockets (marked SFP1 - SFP8), which after using SFP modules (GBICs) enable fiber optic transmission. G1 and G2 ports are used to connect further network devices through RJ45 socket. The LEDs at the front panel indicate the operation status (description in the table below).

Connectivity via fiber optics cables allows for fast and stable data transmission over long distances, resistant to electromagnetic interference and adverse environmental conditions. It also enables easy expansion of network in future.

### 1.2 Block diagram.



Fig. 1. Block diagram.
1.3. Description of components and connectors.

Table 1. (see Fig.2)

| Element no. <br> (Fig. 2) | Description |
| :---: | :--- |
| $[1]$ | $2 \times$ RJ45 ports |
| $[2]$ | $8 \times$ SFP ports (1;8) |
| $[3]$ | DC power supply socket |
| $[4]$ | Additional mounting elements |



Fig. 2. The enclosure view.

### 1.4. Technical parameters.



Table 2.

| Ports | 10 10/100/1000Mb/s ports ( $8 \times$ SFP + $2 \times$ RJ45) with connection speed auto-negotiation and MDI/MDIX Auto Cross |
| :---: | :---: |
| Protocols, Standards | IEEE802.3i, 802.3u, 802.3x CSMA/CD, TCP/IP |
| Bandwidth | 16Gbps |
| Transmission method | Store-and-Forward |
| Optical indication of operation | Switch power supply; Link/Act; |
| Power supply | $\sim 100-240 \mathrm{~V} ; 50 / 60 \mathrm{~Hz} ; 0,3 \mathrm{~A}$ <br> switched mode power supply PSD12020 12 V DC / $2 \mathrm{~A} / 24 \mathrm{~W}$ max. |
| Operating conditions | temperature $-10^{\circ} \mathrm{C} \div 40^{\circ} \mathrm{C}$, relative humidity $5 \%-90 \%$, no condensation |
| Dimensions | $\mathrm{W}=221, \mathrm{H}=29, \mathrm{D}=115[+/-2 \mathrm{~mm}]$ |
| Additional equipment | surface mounting sheets |
| Net/gross weight | 0,9 / 1,1kg |
| Protection class <br> EN 60950-1:2007 | 11 (second) |
| Storage temperatur | $-20^{\circ} \mathrm{C} \div 60^{\circ} \mathrm{C}$ |
| Declarations | CE |

## 2. Installation

### 2.1. Requirements

The unit should be mounted in confined spaces, in accordance with the 2nd environmental class, with normal relative humidity ( $\mathrm{RH}=90 \%$ maximum, without condensation) and temperature from $-10^{\circ} \mathrm{C}$ to $+40^{\circ} \mathrm{C}$. 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 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. Install GBIC's to SFP sockets.
2. Connect switch to the PSD12020 12 V DC power supply unit desktop type.
3. Connect the power supply to the 230 V socket.
4. Connect devices to G1, G2 ports.
5. Check the optical indication of the switch operation (see Table 3).

Connection schemes.


## 3. Operation indication.

Table 3. Operation indication
OPTICAL INDICATION OF THE SWITCH's POWER SUPPLY

| GREEN LED LIGHT (Power) <br> Indication of the switch's <br> power supply | PWR | OFF - no power supply of the switch <br> ON - power supply on, normal operation |
| :--- | :--- | :--- |

OPTICAL INDICATION AT THE SFP PORTS (1 $\div 8$ )

| GREEN LED LIGHT (SFP) | OFF- no connection |
| :--- | :--- | :--- |
| The connection status of LAN |  |
| devices and data transmission |  |$\quad$ LINK $\quad$| ON - the device is connected |
| :--- |
| Blinking - data transmission |

OPTICAL INDICATION AT THE UP LINK PORTS

| OPTICAL INDICATION AT THE UP LINK PORTS |  |
| :---: | :---: |
| GREEN LED LIGHT $\downarrow$ | OFF- no connection/ the device is connected $10 / 100 \mathrm{Mb} / \mathrm{s}$ ON - the device is connected $1000 \mathrm{Mb} / \mathrm{s}$ |
| YELLOW LED LIGHT (LINK) <br> The connection status of LAN devices and data transmission | OFF- no connection ON - the device is connected $10 / 100 / 1000 \mathrm{Mb} / \mathrm{s}$ 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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