

FLEXtra SLIM Ethernet-Switch FO, unmanaged, 2x SFP + 6x RJ45, 1 Gbit (700-844-6FO21)

Version 1 for HW-Version 1

Application area

The Helmholz "FLEXtra SLIM Ethernet Switch FO, unmanaged, 2x SFP + 6x RJ45, 1 Gbit" is suitable for mounting on a top-hat rail and connects up to 6 RJ45 Ethernet participants and 2 fiber optic Ethernet participants with up to 1000 Mbit/s. Standard SFP/SFP+ modules for single-mode and multi-mode fiber optics can be used for the fiber optic connection.

The FLEXtra SLIM Ethernet switch is also suitable for PROFINET networks. The LLPD (neighbourhood detection) and PTCp (time Synchronization) functions are handled correctly by the switch in accordance with the PROFINET standard. The FLEXtra SLIM Ethernet switch FO therefore complies with PROFINET Conformance Class A.

Connections

The FLEXtra SLIM Ethernet switch has 2 ports for SFP/SPF+ modules (X1 P1 and X1 P2) and 6 RJ45 connections (X1 P3 – X1 P8). The switch must be supplied with 24 V DC at the wide-range input "Ext. V DC 18...30 V" using the supplied connector plug. The connection (FE, ⚡) is for the functional earth. Connect this correctly to the reference potential.

Features

- Store-and-Forward architecture
- 10Base-T/100Base-TX/1000Base-T (RJ45)
- 100BaseFX/1000Base-X (SFP)
- Full-/Half-Duplex (RJ45)
- Autonegotiation (RJ45)
- Auto MDI/MDI-X (IEEE 802.3u Auto crossover support)
- LLDP & PTCp Delay-Traffic blocking (for PROFINET networks)
- PROFINET Conformance Class A
- QoS-Priority Queues: 8
- 4K MAC address lookup table
- Maximum frame size: 9216 bytes

LEDs

PWR Led

On = Power supply present

Off = No voltage or the device is defective

RJ45 LEDs

Orange (Link/Activity):

On = Connected

Blinks = Data transmission

Green (Speed):

On = 1000 Mbps

Off = 10/100 Mbps



Verwendung von SFP-Modulen

Up to 2 SFP transceivers can be plugged into the FLEXtra SLIM Ethernet Switch FO. Each SFP transceiver is a separate port in the switch. The FLEXtra SLIM Ethernet Switch FO has no manufacturer lock-in, i.e. SFP modules from any manufacturer can be used. As there are a large number of manufacturers and SFP transceivers on the market, we cannot guarantee that all transceivers will function properly.

Helmholz offers the following SFP transceiver modules that have been tested with the FLEXtra SLIM Ethernet Switch FO:

700-997-1AM01	SFP-Transceiver 1000 MBps, Singlemode 1310 nm, LC-connector, up to 10 km
700-997-1AN01	SFP-Transceiver 1000 MBps, Singlemode 1310 nm, LC- connector, up to 40 km
700-998-1AD01	SFP-Transceiver 1000 MBps, Multimode 850 nm, LC- connector, up to 500 m
700-998-1AG01	SFP-Transceiver 1000 MBps, Multimode 1310 nm, LC- connector, up to 2 km

Please ensure that an SFP transceiver with the same technical specifications is used on the other side of the fibre optic connection.

To insert an SFP transceiver, the protective cap on the SFP slot must be removed. Please keep the protective cap in case the SFP transceiver needs to be removed again. The protective cap prevents dirt from contaminating the empty SFP slot, which could lead to malfunctions.

SFP transceivers can also be inserted when the FLEXtra SLIM Ethernet Switch FO is powered up and the other ports are in operation. The switch automatically detects newly inserted SFP modules and puts them into operation.



Attention: *If the device is used in a manner not specified by the manufacturer, the protection provided by the device may be affected. Pay special attention to the correct contact during cable installation. If you have problems, always read the latest documentation first, which can be found on the Internet at www.helmholz.com. Connected circuits shall meet the requirements of Limited energy circuits acc. UL61010-1.*

Technical data

Order no.	700-844-6FO21
Name	FLEXtra SLIM Ethernet-Switch FO, unmanaged, 2x SFP + 6x RJ45, 1 Gbit
Scope of delivery	Ethernet 8-port switch with power supply plug
Dimensions (DxWxH)	65 x 25 x 157 mm
Weight	approx. 270g
LAN interface	
Number	6x RJ45 2x Fiber Optic (FO) for SFP Transceiver modules, Singlemode or Multimode
Transmission rate	RJ45: 10/100/1000 Mbit/s SFP/SFP+: 100/1000 Mbit/s
Type	RJ45: 10Base-T/100Base-TX/1000Base-T, SFP: 100BaseFX/1000Base-X Full-/Half-Duplex, Autonegotiation, Auto MDI/MDI-X; IEEE Auto crossover (RJ45); LLDP & PTCP Delay-Traffic blocking (for PROFINET networks)
Status indicator	
Power display	1 LED, green
Ethernet status	12 LEDs, green/orange
Power supply	
Voltage supply	24 V DC (18...30 V DC)
Current draw	max. 250 mA with 24 V DC
Power loss	Max. 6,0 W
Ambient conditions	
Ambient temperature	-25 °C ... +60 °C
Transport and storage temp.	-40 °C ... +85 °C
Relative air humidity	95 % r H without condensation
Protection rating	IP20
Approvals	CE

Note:

The contents of this document have been checked by us for matching with the hardware and software described. However, we assume no liability for any existing differences, as these cannot be fully ruled out. The information in this document is, however, updated on a regular basis. When using your purchased products, please make sure to use the latest version of the document, which can be viewed and downloaded in the Internet at www.helmholz.de.