FLEXtra SLIM SPE-Switch, unmanaged, 6-Port, 4x SPE 10 Mbit (T1L) + 2x RJ45, 1 Gbit (700-848-6ES11)

Version 1 for Hardware 1

Application area

The Helmholz "FLEXtra SLIM SPE-Switch, unmanaged, 6-Port" is suitable for installation on a DIN rail and connects up to 4 Ethernet devices via SPE with 10 Mbit and 2 Ethernet devices with up to 1000 Mbps via RJ45. The FLEXtra SLIM SPE switch is also suitable for PROFINET networks. The LLPD (neighbourhood detection) and PTCP (time synchronization) functions are handled correctly with the switch in accordance with the PROFINET standard. The FLEXtra SLIM SPE switch therefore complies with PROFINET Conformance Class A.

Connections

The FLEXtra SLIM Ethernet SPE switch has 4 SPE connections (X1 P1 - X1 P4) and 2 RJ45 connections (X1 P5 & X1 P6). The switch must be supplied with 24 V DC at the wide range input "Ext. V DC 18...30 V" via the supplied connector plug. The connection (FE, ⏚) is for the functional earth. Connect this properly to the reference potential.

Features

- SPE 10Base-T1L (IEEE 802.3cg)
- SPE 10 Mbps, up to 1000m cable length
- SPE Stecker as of IEC 63171-2 („Phoenix Contact“)
- SPoE Power Klassen 10, 11, 12 (SCCP); up to 8,4 W (24V)
- RJ45-Ethernet 100Base-TX/ 1000Base-T, up to 1Gbit
- Store-and-Forward architecture
- Full-/Half-Duplex, Autonegotiation
- Auto MDI/MDI-X (IEEE 802.3u Auto crossover support)
- LLDP & PTCP Delay-Traffic blocking (for PROFINET networks)
- PROFINET Conformance Class A
- VLAN, supported VIDs: 0-62
- QoS-Priority Queues: 8
- 2K MAC address lookup table
- 32KB frame buffer
- Max. frame size 10240 bytes

LEDs

PWR-LED An = Power supply available
Aus = No voltage or the device is defective

SPE LEDs (X1 P1 – X1 P4)

Oben Orange (Power/Error):	Aus = Kein SPoE	Ein = SPoE active	Flashing = SPoE Fehler
Unten Orange (Link/Activity):	Ein = Connected	Flashing = Data transmission	

RJ45 LEDs (X1 P5 + X1 P6)

Orange (Link):	Ein = Connected
Grün (Traffic):	Flashing = Data transmission

Technical data

Order no.	**700-848-6ES11**
Name	FLEXtra SLIM SPE-Switch, unmanaged, 6-Port 4x SPE 10 Mbit (T1L) + 2x RJ45, 1 Gbit
Scope of delivery	SPE Switch with power supply plug
Dimensions (DxWxH)	35,1mm x 25mm x 109mm (without connector)
Weight	Approx. 120g
SPE Interface (X1 P1-P4)	
Number	4
Connection	SPE-Socket, IEC 63171-2 („Phoenix Contact“), IP20
Transmission rate	10Mbit/s
Type	10Base-T1L, IEEE 802.3cg; Autonegotiation up to 1000m cable length, Cable according to IEC 61156-13/14
SPoE, Power Classes (24V)	10: 1.23 W, 1000m, 18AWG 11: 3.2 W, 1000m, 14AWG 12: 8.4 W, 400m, 14AWG
RJ45 Interface (X1 P5+P6)	
Number	2
Connection	RJ45
Transmission rate	100/1000 Mbit/s
Type	100Base-TX, 1000Base-T, Full-/Half-Duplex, Autonegotiation, Auto MDI/MDI-X; IEEE Auto crossover; LLDP & PTCP Delay-Traffic blocking (for PROFINET networks)
Status indication	
Power display	1 LED, green
RJ45 Status	4 LEDs, orange/green
SPE Status	8 LED, Orange top/bottom
Power supply	
Voltage supply	24 V DC (22...30 V DC)
Current draw	max. 200 mA at 24 V DC + max. 2.6 A for SPoE
Power loss	max. 4,5 W + max. 61 W for SPoE
Ambient conditions	
Ambient temperature	-25 °C ... +75 °C
Transport and storage temp.	-40 °C ... +85 °C
Relative air humidity	95 % r. H. without condensation
Pollution degree	2
Protection rating	IP20
Approvals	CE

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.

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 on the Internet at www.helmholz.de.