Product Overview

Fast Ethernet Switches with Power-over-Ethernet

Description

Selected Fast Ethernet switches are available with integrated Power-over-Ethernet functionality. Four 10/100Base-TX ports facilitate the direct supply of terminal devices via the data connection in accordance with IEEE 802.3af with an output of up to 15.4 W per port.

In the copper version the device has a fifth 10/100Base-TX uplink port. Other versions are provided with a fiber optic port in the multimode or single mode version.

Generally the power supply to devices is 48 VDC. The ports are designed redundantly. Dedicated LED displays provide information on the power supply status up to the PoE functionality for each port.

The devices can be operated immediately and require no configuration. Connectors are set automatically by Auto-Negotiation (10/100/100Base-TX) and Auto MDI/MDI-X as well as in accordance with the PoE standard IEEE 802.3af.

Properties

- Easy configuration, no extensive configuration
- 4x 10/100TX ports with PoE
- according to IEEE802.3af
- Version with fiber port for multimode and single mode
- 48 VDC power input, redundant
- Potential free contact indicates power loss
- Effective overvoltage protection

Specifications

General

Type	Fast Ethernet Switch Layer 2, IEEE 802.3 compliant
Performance	store-and-forward switching
MAC-Adresses	2K MAC Address Table

Uplink (Fixed Optical Transceiver)

Number of Ports	1 (MS655102PX-48 and MS655104PX-48)
Type	Fast Ethernet Multimode: 100Base-FX Single Mode: 100Base-F
Connector	SC duplex
Fiber Cable Type	Multimode: 50 or 62.5/125 µm fiber Single Mode: 9/125 µm fiber
Distance	Multimode 62,5/125um or 50/125µm, distance: 2 km Single Mode 9/125µm, duplex, max. Entfernung: 30km Single Mode 9/125µm, duplex, max. Entfernung: 40km

Power Supply (DC)

Input Voltage	2x48 VDC (redundant ports)
Power Consumption	3.5W (without PoE), 57W (Full load PoE)
Connector	screw terminals

Mechanical

Dimensions	30 mm x 95 mm x 140 mm (w x d x h)
Weight	485g
Mounting	DIN35 rail, Wall

Reliability

MTBF	400.000h

Local Ports (Twisted-Pair)

Number of Ports	4 5 (MS655100PX-48 only)
Type	Fast Ethernet, dual Speed, 10/100Base-TX
Connector	RJ-45 jack, shielded
Cable Type	Twisted-Pair cable, category 5e, impedance 100 Ohm, length max. 100 m
Flow Control	IEEE802.3x compliant
Pinout	Auto MDI/MDI-X, auto polarity
Power-over-Ethernet	Power Sourcing Equipment (PSE) IEEE 802.3af class 0, max. 15.4 W, forced-mode (legacy-devices), pinout wires 1/2 (+), 3/6 (-)

Display

Power	Power1 (green), Power2 (green), Fault (red) PoE: Feeding Power (green)
Link	Per port: Link/Activity (green), Full duplex/Collision (yellow)

Environment

Operating Temperature	-10°C..60°C -40°C..+75°C (X-Version)
Storage Temperature	-40°C..85°C
Relative Humidity	5%..95% non condensing

Standards Compliance

CE Mark	EN61000-4-2, EN61000-4-3 EN-61000-4-4, EN61000-4-5 EN61000-4-6, EN61000-4-8 EN61000-4-11, EN61000-4-12 EN61000-6-2, EN61000-6-4
Safety	EN60950-1
IEEE (Ethernet)	IEEE 802.3 10Base-T Ethernet IEEE 802.3u 100Base-TX and 100Base-FX Fast Ethernet IEEE802.3x Flow Control and Back Pressure

Order Information

Description	Article Number
5 Port Fast Ethernet PoE-Switch, 4x 10/100TX with PoE, 1x 10/100TX Uplink, 48 VDC power supply, extended temperature range -40..+75°C	**MS655100PX-48**
5 Port Fast Ethernet Switch 4x 10/100TX with PoE, 1x 100FX Multimode 1310 nm SC duplex 2 km, 48 VDC power supply, extended temperature range -40..+75°C	**MS655102PX-48**
5 Port Fast Ethernet Switch 4x 10/100TX with PoE, 1x 100FX, Single mode 1310 nm SC duplex 30 km, 48 VDC power supply, extended temperature range -40..+75°C	**MS655104PX-48**