

Product Overview

Fast Ethernet Bridge 10/100T / 100FX USB powering



Description

The Mini Bridge enables fast and cost-effective integration of 10 Mbps Ethernet equipment in fiber optic-based Fast Ethernet networks. In addition to media conversion there is a corresponding speed matching for 10/100Base-TX.

The Auto Negotiation protocol is supported for automatic configuration of half and full duplex mode. Furthermore, the operation mode (full and half duplex) can be manually configured with a DIP switch.

The bridge is designed as a desktop device and available in two versions: for multimode (1000Base-SX) and single mode (1000Base-LX). A special feature is the possibility of an alternative power supply via the USB port so that the attached power supply need not to be used.

In an extended version there is an additional power supply via Power-over-Ethernet possible. In this case, the Bridge is used as a consumer (PD – Powered Device) and taps the corresponding power from the RJ-45 port.

Properties

- Fast and cost-effective media conversion for multimode and single mode
- Simple segment splitting in Fast Ethernet networks
- Alternative power supply via USB-connection
- Optional powering over Power-over-Ethernet (PD)

Specifications

General

Type	Fast Ethernet Bridge to connect Twisted-Pair-(10/100Base-TX) and FO (100Base-FX) segments
Performance	Fast Ethernet Bridge to connect Twisted-Pair-(10/100Base-TX) and FO (100Base-FX) segments

Uplink (Fixed Optical Transceiver)

Number of Ports	1
Type	Fast Ethernet, 100Base-FX
Connector	SC or ST duplex SC simplex (MS400162A/B only)
Fiber Cable Type	Multimode: 50 or 62.5/125µm fiber or Single Mode: 9/125µm fiber
Distance	Multimode: 2 km Single Mode: 15 km, 40 km, 80 km, 125 km Single WDM: 20 km
Output Optical Power	Multimode 1300nm: min. -19dBm Single Mode 1300nm 15 km: min. -11,5dBm Single Mode 1300nm 40 km: min. -3dBm Single Mode 1550nm 80 km: min. -5dBm Single Mode 1550nm 125 km: min. 1.8dBm
Receiver Sensitivity	Multimode 1300nm: min. -31dBm Single Mode 1300nm 15 km: min. -31dBm Single Mode 1300nm 40 km: min. -38dBm Single Mode 1550nm 80 km: min. -37dBm Single Mode 1550nm 125 km: min. -37dBm

Power Supply (DC)

Input Voltage	5 V DC / max. 1500 mA ext. power supply or optional self powering cable USB (Power Selector)
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Mechanical

Dimensions	94 mm x 70.3 mm x 26.2 mm (w x d x h)
Housing Color	black

Local Ports (Twisted-Pair)

Number of Ports	1
Type	Fast Ethernet, 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 Flow Control and Back pressure
Pinout	Auto MDI/MDI-X, auto polarity

Display

Power	ready for operation
Link	FX-Receive Data received on fiber FX-FDX FO Half-/Full duplex TX-Link Twisted pair link TX100 Twisted Pair 10/100 Mbit

Environment

Operating Temperature	0°..55°C
Storage Temperature	-20°..80°C
Relative Humidity	5% to 80% non condensing

Order Information

Description	Article Number
Fast Ethernet Bridge 1x10/100TX 1x100FX Multimode 1310nm SC, ext. power supply	MS400160
Fast Ethernet Bridge 1x10/100TX 1x100FX Multimode 1310nm ST, ext. power supply	MS400161
Fast Ethernet Bridge 1x10/100TX 1x100FX Single Mode 1310nm SC Laser min. 15km, ext. power supply	MS400162
Fast Ethernet WDM Bridge 1x10/100TX 1x100FX Single Mode SC simplex, Tx:1310nm Rx:1550nm, ext. power supply	MS400162A
Fast Ethernet WDM Bridge 1x10/100TX 1x100FX Single Mode SC simplex, Tx:1550nm Rx:1310nm, ext. power supply	MS400162B
Fast Ethernet Bridge 1x10/100TX 1x100FX Single Mode 1300nm SC Laser min. 15km, ext. power supply	MS400163
Fast Ethernet Bridge 10/100Base-TX/100Base-FX 1310nm Single Mode, 40 km, ext. power supply	MS400164
Fast Ethernet Bridge 10/100Base-TX / 100Base-FX, Multimode 1310nm SC 2km, ext. power supply or PoE PD	MS400160PD
Fast Ethernet Bridge 10/100Base-TX / 100Base-FX, Single Mode 1310nm SC 30km, ext. power supply or PoE PD	MS400162PD
Fast Ethernet Bridge 10/100Base-TX/100Base-FX 1550nm Single Mode, 80 km, ext. power supply	MS400168
Fast Ethernet Bridge 10/100Base-TX/100Base-FX 1550nm Single Mode, 125 km, ext. power supply	MS400169

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