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Product Data Sheet

MCR300-1T/1S

Gigabit Ethernet to SFP Media Converter

OVERVIEW

The IFS Gigabit Ethernet to SFP Media Converter is designed for the most demanding extended IP network applications offering the fiexibility of SFP technology for Gigabit Ethernet transmission over optical fiber.

SFP Technology

The IFS MCR300-1T/1S converts 10/100/1000Base-T Ethernet on copper to 1000Base-LX/SX optical fiber via Small Form-format Pluggable (SFP) technology. This media converter can be custom configured to your exact system design specifications by utilizing a variety of IFS SFP Mini-GBIC modules. IFS SFP Mini-GBIC modules are available in a variety of versions from multi-mode or single mode fiber, 1 or 2 ?bers and wide-temperature versions.

Enhanced Smart Link Management

The MCR300-1T/1S provides Auto MDI/MDI-X on its TP port and a DIP-switch to configure the Link Fault Pass-through function (LFP). The LFP function includes both Link Loss Carry Forward (LLCF) and Link Loss Return (LLR). The LLCF/LLR function combination provides efficient TP and optical transmission media monitoring and enables immediate alarm notification to network administrators in the event of a link problem.

Unified Enclosure Design

The MCR300-1T/1S is designed with a unified enclosure that can be used in a stand-alone installation or can easily be inserted into the IFS MCR-R15 media converter rack. The IFS Media Converter Rack can provide DC power for up to 15 MCR Series Media Converters.

Standard Features

- 10/100/1000Base-TX
- Auto-negotiation and Auto-MDI/MDI-X
- Supports OAM (TS-1000 and IEEE 802.3ah)
- 9K jumbo frame supported
- IEEE 802.3z 1000Base-LX/SX standards
- 1 SFP slot provides custom configuration
- Optical fiber and distance varies by SFP (ordered separately)
- Plug-n-play installation
- LED indicators for easy local network diagnostics
- DIP-switch for LFP function (Enable / Disable) setting
- Unified design for stand-alone or rack mount installation (MCR-R15 chassis)

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Specifications

Ethernet

- Data Rate 10/100/1000Mbps
- OAM TS-1000, IEEE 802.3ah terminal
- Jumbo Packet Size 9K
- Flow Control Half/Full-duplex
- Connector RJ-45 (Auto-MDI/MDI-X)
- Cable Type and Distance 10Base-T: 2-pair UTP Cat. 3,4,5, up to 100 m / 100Base-TX: 2-pair UTP Cat. 5, up to 100 m / 1000Base-T : 2-pair UTP Cat. 5/5e/6, up to 100m

Fiber

- Data Rate 1000Base-LX/SX
- Connector SFP (Mini-GBIC) port
- Fiber Type and Distance Varies by SFP module

LED Indicators & Controls

- Power/Status Green/On – power detected (+5VDC)
- 10/100/100Base-T port link/activity Green/On – link established / Green/blinking – active port (TX/RX)
- 10/100/1000Base-T port speed Green/On – 1000Mbps full duplex mode operation / Green/Off – 10/100Mbps full duplex mode operation
- SFP (Mini-GBIC) port link Green/On – link established / Green/blinking – active port (TX/RX)
- DIP switch LFP function (Enable/Disable) setting

Electrical & Mechanical

- Power 5VDC, 2A (5.6 watts)
- Enclosure Metal
- Dimensions (W x D x H) in, mm 3.82 x 2.76 x 1.02 in.; (97 x 70 x 26 mm)
- Weight 0.41 lbs. / 190 grams

Environmental

- Operating Temperature 0°C ~ 50°C
- Storage Temperature -10°C ~ 70°C
- Relative Humidity 5% ~ 90% (non-condensing)
- MTBF > 50,000 hrs @ 25°C

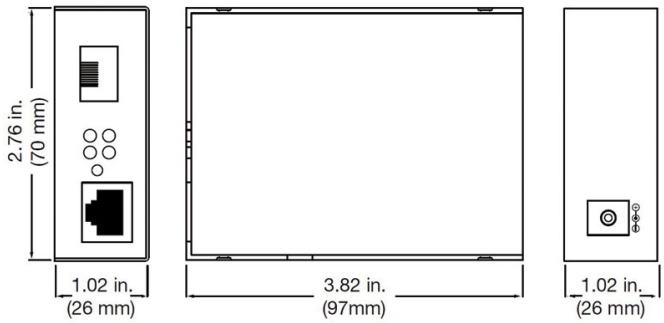
Standards Compliance

- IEEE IEEE 802.3, 10Base-T / IEEE 802.3u, 100Base-TX / IEEE 802.3ab 1000Base-T / IEEE 802.3z 1000Base-SX/LX/BX
- EMI EN 55022 CLASS A / EN61000-3-2:2006 / EN61000-3-3: 1995+1A:2001+A2:2005
- EMS EN 55024:1998+A1:2001+A2:2003 / IEC 61000-4-2:2001 / IEC 61000-4-3:2008 / IEC 61000-4-4:2004 / IEC 61000-4-5:2005 / IEC 61000-4-6:2008 / IEC 61000-4-8:2001

Accessories

- PS5VDC2A-US 5VDC@2A Wall-mount Power Supply
- PS5VDC2A-UK 5VDC@2A Wall-mount Power Supply
- PS5VDC2A-EU 5VDC@2A Wall-mount Power Supply
- MCR-R15 MCR Series Media Converter Chassis

Diagram



Ordering Information

MCR300-1T/1S
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