



MCR200-1T-1TW

Ethernet over Telephone Wire Media Converter

Overview

The IFS Ethernet to Telephone Wire Media Converter is a highperformance module that combines two well-proven technologies— Ethernet and VDSL2 — providing a cost-effective solution for utilizing an existing telephone wire (POTS)* infrastructure when migrating from analog to an Ethernet/IP system.

This module must be used in pairs and provides plug-and-play installation. The one box design allows for easy set-up as either a client-side (CPE) or central-side (CO) operating device. The module is IEEE 802.3 compliant and supports multiple network protocols. In addition, the module provides on-board feature-rich diagnostic LEDs and can be used with 4-pair, 50 or 100-pair telephone (POTS) wire.

The IFS Ethernet to Telephone Wire Media Converter can extend Ethernet transmission up to 1 mile (1.6km) depending on bandwidth requirements and quality of the telephone wire (POTS) used. Also, depending on distance and bandwidth, these modules can send data from multiple IP devices when used with a network switch.

These modules can be used for applications such as IP cameras, IP access control, IP intercom, or any Ethernet data transmission.



Standard Features

- Cost-effective VDSL2 CO/CPE bridge solution
- One-box design, CO/CPE selectable via DIP-switch
- Selectable target data rate and target SNR margin
- Discrete Multi-Tone (DMT) line coding
- 10/100Mbps Ethernet
- Auto-negotiation and auto-MDI/MDI-X
- Half-duplex back pressure and IEEE802.3x full-duplex
- Supports up to 1536 bytes packet size
- 802.1Q VLAN tag transparent
- Plug-and-play installation
- Compact size
- Supports telephone wire (POTS)
- Extensive LED indicators for network diagnostics
- Compatible with MCR-R15 rack chassis
- Easy Plug and Play installation
- Compatible with MC250-4T/1CXT or MC251-4P/1CXT modules
- 3-year warranty

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Specifications

Ethernet Description	
Data Rate	10/100Base-TX with Auto-negotiate and Auto-MDI/MDI-X
Connector	RJ-45
Cable	10Base-T (Cat 3, 4, 5) / 100Base-T (Cat 5e) — 328 ft. (100m)
Telephone Wire (VDSL2)	
VDSL2 Transmission Mode	CO/CPE Mode; Channel; Rate Limit; SNR
VDSL-DMT Encoding	ITU-T G.993.1 VDSL; ITU-T G.997.1; ITU-T G.993.2 VDSL2 (Profile 17a support)
Connector	RJ11 Female phone jack
Cable	Twisted-pair telephone wire (AWG24 or better)
VDSL2 Distance > Data Rate	
(Down stream/Up stream) Asymmetric	656 ft. (200m) - 100/55Mbps
	1312 ft. (400m) - 90/50Mbps
	2625 ft. (800m) - 60/25Mbps
	5249 ft. (1600m) - 25/4 Mbps
(Down stream/Up stream) Symmetric	656 ft. (200m) - 90/90Mbps
	1312 ft. (400m) - 90/90Mbps
	2625 ft. (800m) - 55/50Mbps
	5249 ft. (1600m) - 20/15Mbps
LED Indicators	
Power	On - Green
10/100 Base-TX Port	LNK/ACT; 100Mbps - Green
VDSL2 (Telephone Wire) Port	LNK/ACT; CO Mode; CPE Mode - Green
Electrical & Mechanical	
Power	5V @ 2A
Enclosure	Metal
Dimensions (H x W x D)	3.82 x 2.76 x 1.02 in. (9.7 x 7.0 x 2.6 cm)
Weight	0.44 lbs/200g
Environmental	
Operating Temperature	0° ~ 50°C
Storage Temperature	-20° ~ 70°C
Relative Humidity	0% ~ 90% (non-condensing)

Ordering Information

Part No.	Description
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