

MCR200-1T-1TW

Ethernet over Telephone Wire Media Converter



OVERVIEW

The IFS® Ethernet to Telephone Wire Media Converter is a high-performance 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

VDSL2

- 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

Ethernet

- 10/100Mbps Ethernet
- Auto-negotiation and auto-MDI/MDI-X
- Half-duplex back pressure and IEEE802.3x full-duplex pause-frame flow control
- Supports up to 1536 bytes packet size
- 802.1Q VLAN tag transparent

Installation & Diagnostics

- Plug-and-play installation
- Compact size
- Supports telephone wire (POTS)
- Extensive LED indicators for network diagnostics

Rack Mountable

- Compatible with MCR-R15 rack chassis
- Easy Plug and Play installation
- Compatible with MC250-4T/1CXT or MC251-4P/1CXT modules

Warranty

- 3-year warranty

*The MCR200-1T-1TW utilizes standard telephone (POTS) type cable for transmission of Ethernet/IP data. It is not designed for transmitting Ethernet data on a PBX system or public switch telephone network (PSTN).

MCR200-1T-1TW

North America
T 855-286-8889

Latin America
T 561-998-6114

Ethernet over Telephone Wire Media Converter

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	(Down stream/Up stream) Symmetric
	656 ft. (200m) - 100/55Mbps	656 ft. (200m) - 90/90Mbps
	1312 ft. (400m) - 90/50Mbps	1312 ft. (400m) - 90/90Mbps
	2625 ft. (800m) - 60/25Mbps	2625 ft. (800m) - 55/50Mbps
	5249 ft. (1600m) - 25/4 Mbps	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°C~50°C
Storage Temperature	-20°C~70°C
Relative Humidity	0%~90% (non-condensing)

*The actual data rate will vary based on the quality of the twisted-pair wire and environmental factors. See instruction manual for a complete listing of data rates at various distances.

Ordering Information

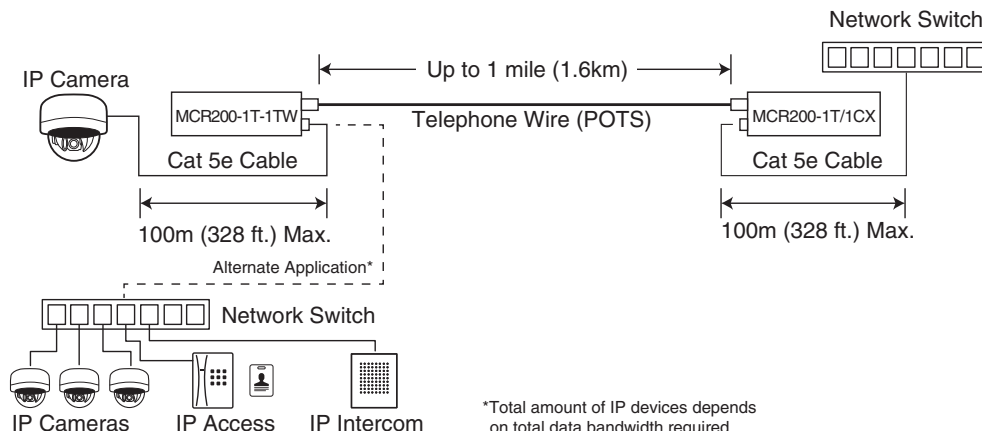
MCR200-1T-1TW	Ethernet over Telephone Wire (VDSL2)
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Note: External power supply must be purchased separately. Must be used in pairs or with the MC250-4T/1CXT or MC251-4P/1CXT modules.

Accessories

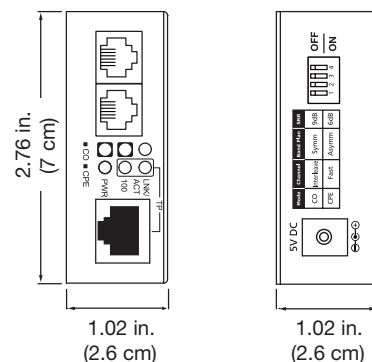
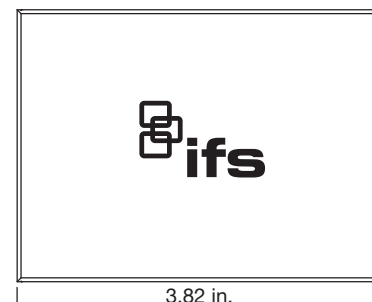
PS5VDC2A-US	5VDC 2A Wall Mounted Power Supply
MCR-R15	Media Converter Rack w/Power Supply

Typical Application



*Total amount of IP devices depends on total data bandwidth required.

Dimensional Diagrams



Agency Compliances

- FCC
- CE



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Specifications subject to change without notice.

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