



## Product Data Sheet

# MCR200-1T/1CX

## Ethernet Over Coax Media Converter

### Overview

The IFS Ethernet to Coax 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 coax cable 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 either 50 or 75 ohm coax.

The IFS Ethernet-over-Coax media converter can extend Ethernet transmission up to 1.8 miles (3km) depending on bandwidth requirements and quality of the coaxial cable used. Also, depending on distance and bandwidth, these modules can send data from multiple IP devices when used along 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 pause-frame flow control
- Supports up to 1536 bytes packet size
- 802.1Q VLAN tag transparent
- Plug-and-play installation
- Supports 50 or 75 ohm coax
- Extensive LED indicators for network diagnostics
- Compatible with MCR-R15 rack chassis
- Easy Plug and Play installation

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### Specifications

#### Ethernet

- 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)

#### Coax (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: BNC female
- Cable: 50 or 75 ohm coax

#### VDSL2 Distance > Data Rate\*

- (Down stream/Up stream)  
Asymmetric:
  - 1300 ft. (400m) - 100/64Mbps
  - 3200 ft. (1000m) - 94/44Mbps
  - 5900 ft. (1800m) - 60/14Mbps
  - 9800 ft. (3000m) - 25/5 Mbps
- (Down stream/Up stream)  
Symmetric:
  - 1300 ft. (400m) - 100/100Mbps
  - 3200 ft. (1000m) - 69/66Mbps
  - 5900 ft. (1800m) - 40/29Mbps
  - 9800 ft. (3000m) - 17/13Mbps

#### LED Indicators

- Power: On - Green
- 10/100 Base-TX Port: LNK/ACT; 100Mbps - Green
- VDSL2 (Coax) 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)

#### Accessories

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

### Diagram

### Ordering Information

MCR200-1T/1CX

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