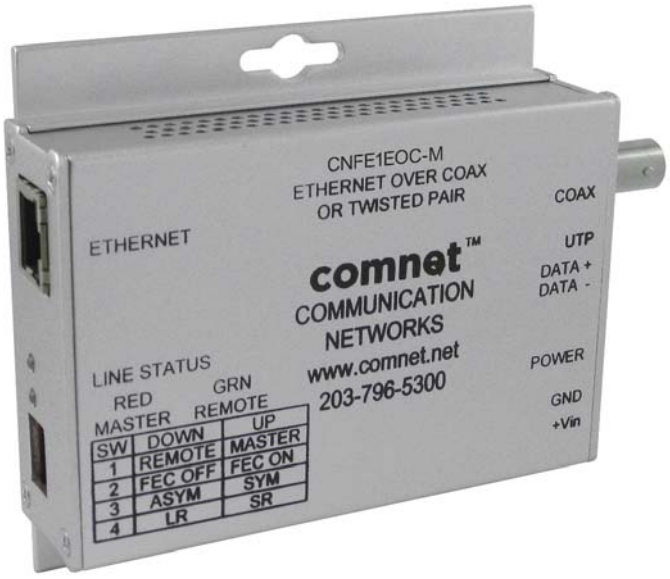
comnet
Communication Networks

ValueLine

CNFE1EOC-M

Ethernet over twisted pair or coaxial cable using VDSL2 (EoVDSL) technology



A ComNet ValueLine Product

Lower price: designed for installation in benign (0 to +60° C) operating environments.

Description

The ComNet™ CNFE1EOC-M modems support Ethernet over twisted pair or coaxial cable, at data rates of up to 90 Mbps. Ethernet data may be transmitted over a telephone-grade twisted copper pair, legacy serial cabling, or standard 75 ohm coaxial cable circuits, making this unit ideal for those applications where it is desired to utilize an existing installed base of copper wiring for Ethernet transmission. These modems are the perfect solution for upgrading a legacy twisted copper or coaxial cable plant for use with Ethernet, when compared to the significant costs of installing new network cabling. The fastest usable data rate is automatically selected, depending upon the transmission distance and cable quality. LED status indicators are provided for rapidly ascertaining the operating status of the modem and the link.

Applications

- Ethernet transmission over existing copper telephone-grade, serial or 75Ω coaxial cable

Features

- **Utilizes latest VDSL2 technology for fastest data rate transmission and greatest transmission distance**
- **Ideal for multiple-channel Ethernet over VDSL applications where modem space may be limited**
- Supports transmission distances of up to 10,000 ft (3 km) over twisted copper, or up to 1500 ft (457 m) over coaxial cable
- Symmetric line rates of over 91 Mbps
- Automatically sets fastest possible data rate vs. cable quality and transmission distance
- User-configurable master/remote, forward error correction, asymmetrical/symmetrical data, and long-reach/short-reach selection
- IEEE 802.3 Compliant. 10/100 BASE-T/TX Ethernet port with automatic MDI/MDI-X crossover
- Screw Terminals for twisted copper circuits, or BNC connector for coaxial cable
- A smaller-sized package for stand-alone mounting only, for use in those applications where space may be limited
- Five year warranty

ValueLine
CNFE1EOC-M

Ethernet over twisted pair or coaxial cable using VDSL2 (EoVDSL) technology

specifications

INTERFACE

Ethernet Port:

Ethernet connector:	RJ45
Cable:	Cat 5, Cat 5e, Cat 6
Data Rate:	10/100Mbps
Distance:	100m (328ft)

Line Side Port 1 (Twisted Pair):

UTP connector:	Screw Terminal Block
Cable:	Telephone-grade 19 to 26 AWG (one twisted pair)

Throughput:	(Downstream / Upstream)
1000 ft (305 m)	70 Mbps / 68 Mbps
2500 ft (762 m)	26 Mbps / 17 Mbps
5000 ft (1524 m)	16 Mbps / 1 Mbps
7500 ft (2286 m)	5 Mbps / 0.5 Mbps
10,000 ft (3048 m)	1 Mbps / 0.25 Mbps

Line Side Port 2 (75Ω Coax):

Coaxial connector:	BNC
Impedance:	75 ohm coax

Throughput:	(Downstream / Upstream)
200 ft (61 m)	88 Mbps / 95 Mbps
500 ft (152 m)	85 Mbps / 93 Mbps
1000 ft (305 m)	83 Mbps / 89 Mbps
1500 ft (457 m)	76 Mbps / 83 Mbps

Faster data rates and greater transmission distances thru coaxial cable are possible, depending upon the type and quality of the coaxial cable utilized

USER-CONFIGURABLE SELECTION OF:

- Master/Remote Operation
- Symmetrical/Asymmetrical Data
- Forward Error Correction
- Long or Short Range operation for optimal BER (Bit Error Rate) performance

ELECTRICAL & MECHANICAL

Power:	
Stand Alone:	12–27 VAC @ < 320 mA or 12–27 VDC @ < 320 mA
Overload Protection:	Automatic Resettable Solid-State Current Limiters
Circuit Board:	Meets IPC Standard

SIZE (L×W×H)

Standard Size (CNFE1EOC):	6.1 × 5.3 × 1.1 in., (15.5 × 13.5 × 2.8 cm)
Small (CNFE1EOC-M):	4.1 × 3.7 × 1.1 in., (10.4 × 9.4 × 2.8 cm)
Shipping Weight:	<2 lbs./0.9 kg

ENVIRONMENTAL

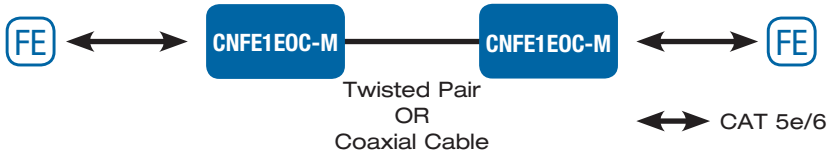
MTBF:	>100,000 hours
Operating Temp:	0° C to +60° C
Storage Temp:	-40° C to +85° C
Relative Humidity:	0% to 95% (non-condensing)*

* May be extended to humidity with condensation conditions by adding suffix '/C'

AGENCY COMPLIANCE
PART 15 COMPLIANT
E322911
N24621

MADE IN THE USA

PART NUMBER	DESCRIPTION	MEDIA REQUIRED	MAX. DISTANCE	# RACK SLOTS
CNFE1EOC	Ethernet over Twisted Pair or Coax	See "Interface" Above	See "Interface" Above	1
CNFE1EOC-M	Ethernet over Twisted Pair or Coax, Small Size	See "Interface" Above	See "Interface" Above	N/A



comnet
Communication Networks

3 CORPORATE DRIVE | DANBURY, CT 06810 | USA
T: 203.796.5300 | F: 203.796.5303 | TECH SUPPORT: 1.888.678.9427 | INFO@COMNET.NET

8 TURNBERRY PARK ROAD | GILDERSOME | MORLEY | LEEDS, UK LS27 7LE
T: +44 (0)113 307 6400 | F: +44 (0)113 253 7462 | INFO-EUROPE@COMNET.NET

© 2010 Communications Networks Corporation. All Rights Reserved. "ComNet" and the "ComNet Logo" are registered trademarks of Communication Networks, LLC.