comnet
Communication Networks

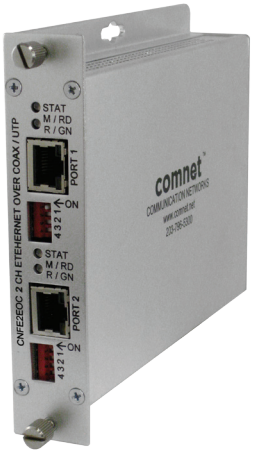
2 Ethernet channels over 2 twisted pair or 2 coaxial cables using VDSL2 (EoVDSL)* technology

CNFE2EOC

ValueLine
Performance and Value

POWER SUPPLY INCLUDED

ETHERNET OVER COPPER EXTENDER



The ComNet™ CNFE2EOC, containing two independent EoVDSL modem units within one compact package, supports two Ethernet channels over either two twisted copper pairs or two coaxial cables. Any standard telephone-grade twisted copper pair, legacy serial cabling, or standard 75 ohm coaxial cable may be used, making this unit ideal for those applications where it is desired to utilize an existing installed base of copper wiring for Ethernet transmission, when compared to the significant costs of installing new network cabling. LED status indicators are provided for rapidly ascertaining the operating status of the modem and the link. The CNFE2EOC may be DIN-rail mounted by the addition of ComNet model DINBKT1 adaptor plate.

FEATURES

› Utilizes the latest VDSL2 technology for the fastest data rate transmission and greatest transmission distance.

› Two-Channel Design: Contains two independent EoVDSL modem units in one compact package. Ideal for multiple-channel Ethernet-over-VDSL applications where rack or shelf/wall 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 data transmission rates of up to 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-TX Ethernet port with automatic MDI/MDI-X crossover

› May be used as an uplink modem, easily enabling the configuration of a drop-and-repeat/point-to-multipoint EoVDSL communications network by the addition of any managed 10/100/1000 Mbps managed Ethernet switch.

› Plug-and-play design ensures ease of installation, and no electrical or optical adjustments are ever required.

› Voltage transient protection on all power and signal input/output lines provides protection from power surges and other voltage transient events

› Screw Terminals for twisted pair copper circuits, or BNC connectors for coaxial cable

› Unique ComFit Package: May be utilized as a stand-alone package, or may be mounted within the ComNet C1 or C2 Card Cage, and is fully hot-swappable

› Five year warranty

› Made in the USA

APPLICATIONS

› Point-to-Point or Drop-and-Repeat/Point-to-Multipoint Ethernet transmission over existing telephone-grade copper, legacy serial, or 75Ω coaxial cable circuits

Industrial Security:
- › Any Ethernet-compatible equipment with a maximum data rate of 100 Mbps
- › Ethernet-compatible access control systems, intercom systems, and IP-compatible CCTV camera surveillance networks
- › VOIP (Voice over IP) telephony networks

ITS/Transportation:
- › Connecting Ethernet-based traffic signal controller units onto an existing twisted copper pair or coaxial cable circuit
- › Video Detection Systems (VDS) for analyzing traffic flow patterns and disturbances

** EoVDSL is an acronym for Ethernet over Very High Speed Digital Subscriber Line*

2 Ethernet channels over 2 twisted pair or 2 coaxial cables using VDSL2 (EoVDSL) technology

SPECIFICATIONS

Interface

Ethernet Port	Ethernet connector	(2) RJ45
	Cable	Cat 5, Cat 5e, Cat 6
	Data Rate	10/100Mbps
	Distance	100m (328ft)

Line Side Port 1 (Twisted Pair)

UTP connector	(2) 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	(2) 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

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

Power

Operating Voltage Range	12 to 27 V AC or DC
Power Consumption	9 W Max

Electrical & Mechanical

Overload Protection	Automatic Resettable Solid-State Current Limiters
Circuit Board:	Meets IPC Standard
Size	6.1 × 5.3 × 1.1 in (15.5 × 13.5 × 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)[1]

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

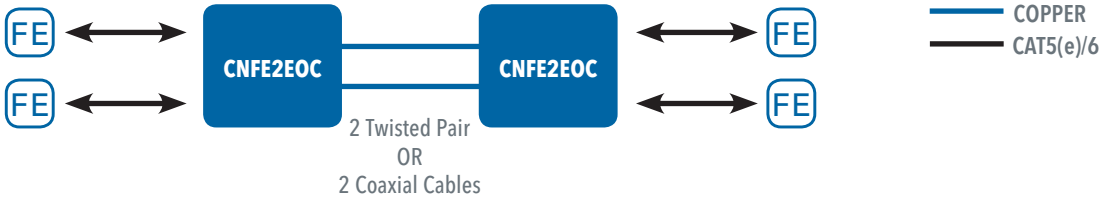
AGENCY COMPLIANCE
PART 15 COMPLIANT · E322911 · N24621

MADE IN THE USA

ORDERING INFORMATION

Part Number	Description
CNFE2EOC	2 Ethernet Channels over 2 Twisted Pair or 2 Coax
Included Accessories	DC Plug-in Power Supply, 90-264 VAC, 50–60 Hz (Included)
Options	RJ-45 to Terminal Block Cable [1] Add suffix '/C' for Conformally Coated Circuit Boards to extend to condensation conditions (Extra charge, consult factory) DIN-Rail Mounting Adaptor Plate Kit - With Mounting Hardware (Optional, order model DINBKT1)

TYPICAL APPLICATION



Low Power Consumption

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