comnet

INSTALLATION AND OPERATION MANUAL

CNFE1EOC-M
FAST ETHERNET OVER VDSL2 (EoVDSL)

The ComNet™ CNFE1EOC-M is an environmentally hardened modem that supports Ethernet over twisted pair or coaxial cable. The devices use VDSL (EoVDSL) technology to support data rates up to 90 Mbs. Ethernet data may be transmitted over a telephone-grade twisted copper pair, legacy serial cabling or standard 75Ω coaxial cable circuits. These modems allow for upgrading of a legacy twisted copper or coaxial cable plant for use with Ethernet rather than installing new network cabling.

The fastest usable data rate is automatically selected, depending upon the transmission distance and cable quality. The CNFE1EOC-M may be deployed in most out-of-plant installations, such as those found in intelligent transportation systems and factory automation/control applications. LED status indicators are provided for rapidly ascertaining the operating status of the modem and the link.

See **Figures 1 – 5** for complete installation details.

The CNFE1EOC-M small size unit operates as standalone module only. See **Page 5** for mounting instructions.
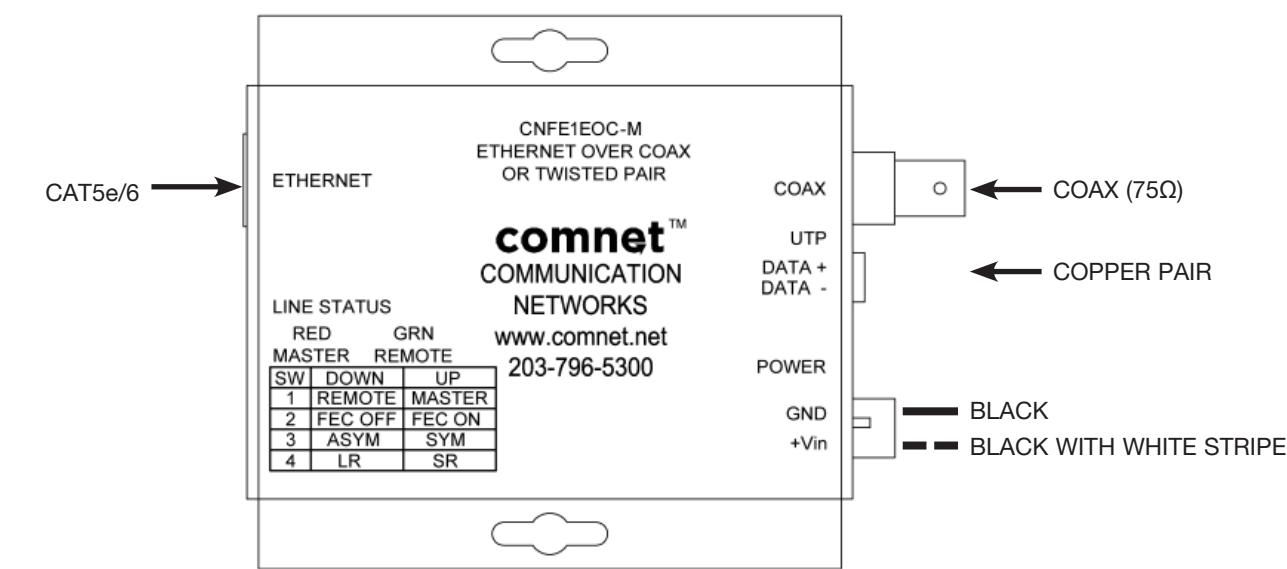
FIGURE 1 – CNFE1EOC-M SMALL SIZE UNIT

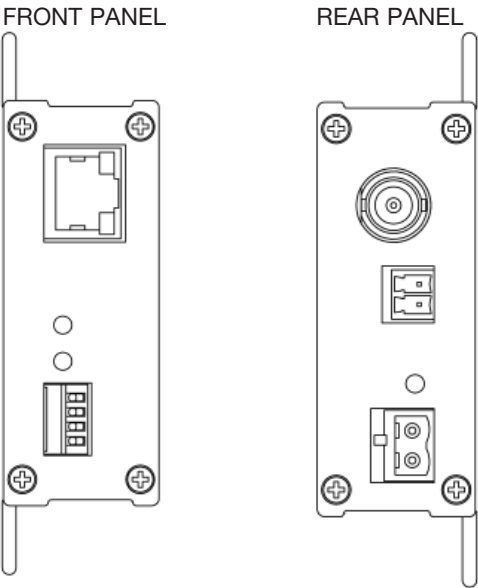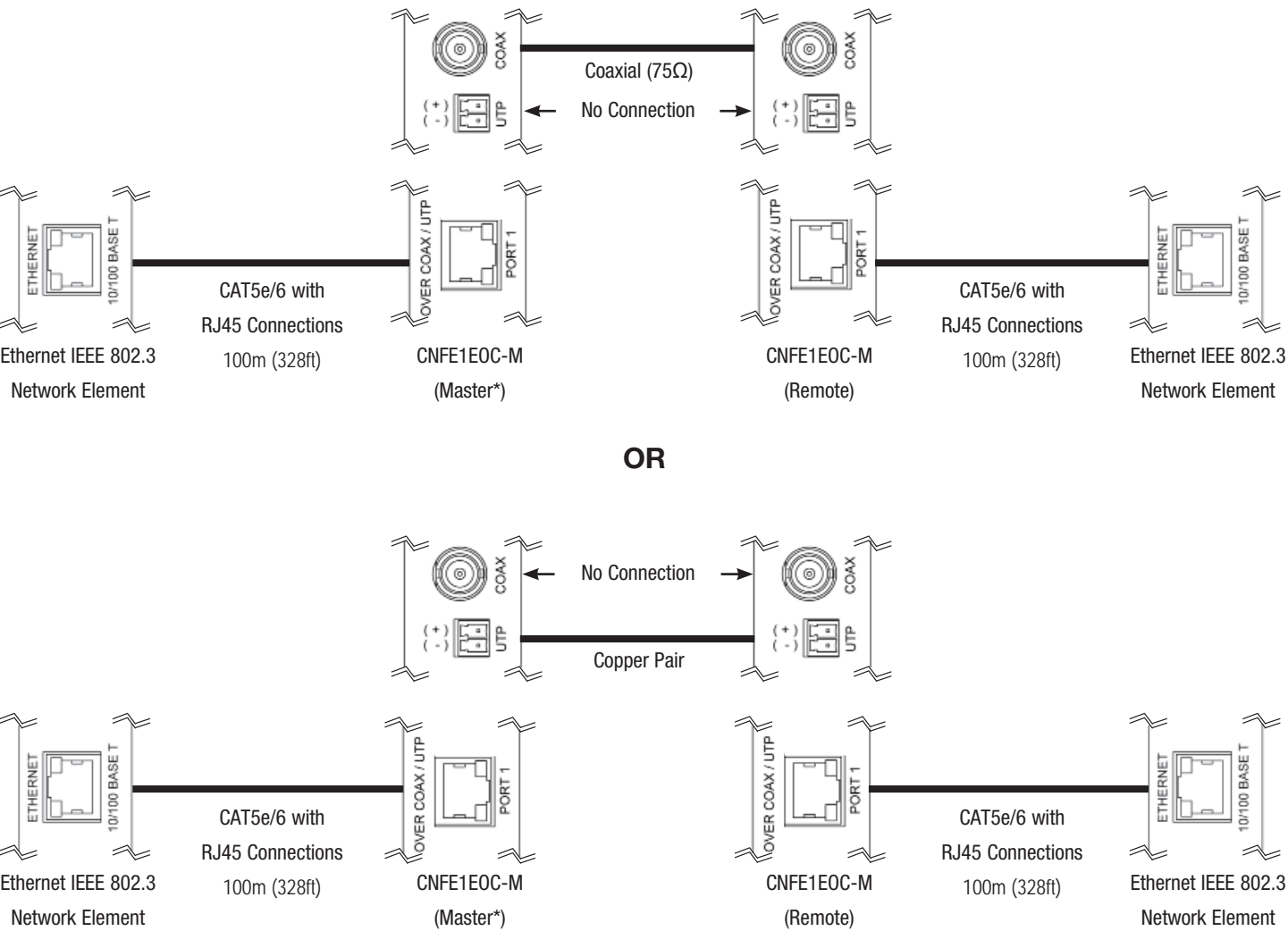## FIGURE 2 – CNFE1EOC-M SMALL SIZE UNIT

FIGURE 3 – POSSIBLE ETHERNET CONFIGURATIONS

Ethernet IEEE 802.3 Network Element determined by user.

Coaxial (75Ω)

← No Connection →

Ethernet IEEE 802.3
Network Element

CAT5e/6 with
RJ45 Connections
100m (328ft)

CNFE1EOC-M
(Master*)

CNFE1EOC-M
(Remote)

CAT5e/6 with
RJ45 Connections
100m (328ft)

Ethernet IEEE 802.3
Network Element

OR

← No Connection →

Copper Pair

Ethernet IEEE 802.3
Network Element

CAT5e/6 with
RJ45 Connections
100m (328ft)

CNFE1EOC-M
(Master*)

CNFE1EOC-M
(Remote)

CAT5e/6 with
RJ45 Connections
100m (328ft)

Ethernet IEEE 802.3
Network Element

* Master unit located at video source.

FIGURE 4 – LED INDICATORS

	LINE STATUS (STAT)	RED MASTER (M/RD) or GRN REMOTE (R/GN)	POWER
GREEN	Line side activity	Remote Configuration	Unit powered up
RED	–	Master Configuration	–
OFF	No activity		Unit powered down

LED STATUS	Low Constant Flashing	Fast Constant Flashing	On	Intermittent Flashing
UNIT STATUS	Idle (Line Is Not Connected)	Master/Remote Negotiating	Idle (Line Is Connected)	Data Flow

FIGURE 5 – SWITCH SETTINGS

SWITCH	DOWN (ON)	UP (OFF)	DEFAULT SETTING
1	Remote	Master	One ON, one OFF as a pair
2	Forward Error Correction Off	Forward Error Correction On	ON
3	Asymmetrical Data	Symmetrical Data	ON
4	Long Reach > 1000ft (305m)	Short Reach < 1000ft (305m)	ON

MECHANICAL INSTALLATION INSTRUCTIONS

INSTALLATION CONSIDERATIONS

This fiber-optic link is supplied as a Standalone module. The unit is provided with a mounting plate with holes for two No. 6 pan head screws (3mm or 3.55mm). See **Figure A**.
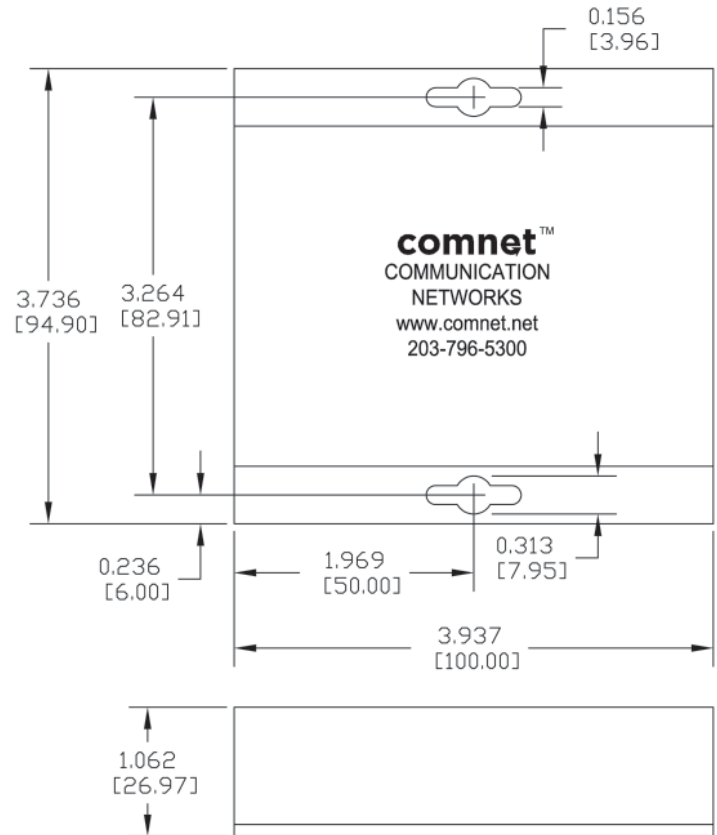
Units should be installed in dry locations protected from extremes of temperature and humidity.

NOTE: Unit is to be used with a Listed Class 2 or LPS power supply rated 9-12 VDC @ 1A.

MADE IN THE
USA

FIGURE A

Dimensions are for a standard ComNet™ medium module

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NETWORKS
www.comnet.net
203-796-5300

0.156
[3.96]

3.736
[94.90]

3.264
[82.91]

0.236
[6.00]

1.969
[50.00]

0.313
[7.95]

3.937
[100.00]

1.062
[26.97]

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