comnet
Communication Networks

INSTALLATION AND OPERATION MANUAL

CWFE(1,2)POCOAX(A,B)[M]

100MBPS ETHERNET OVER COAXIAL CABLE WITH POWER

The ComNet™ CWFE1POCOAX Series transports Ethernet and camera/device operating power between the remote device and head-end location using existing 75Ω coaxial cable. It eliminates the need to have a separate power source at the remote location and provides operating power for the remote ComNet media converter and PoE device. Based on the IEEE 802.3af standard for Power over Ethernet (PoE), the CWFE1POCOAXBM provides up to 15.4 Watts of operating power to the remote powered device (PD). The CWFE1POCOAXA transports Ethernet data at rates of 100 Mbps over a distance of 230 meters (750 feet) over standard 75Ω coaxial cable. The CWFE(1,2)POCOAXA is used at the head end and the CWFE1POCOAXBM is used at the remote location, providing 15 watts of power to the powered device (PD) in the field.

LED indicators are provided for rapidly ascertaining the operating status of the device. See **Figure 9** on **Page 5** for LED explanations.

The CWFE1POCOAXA and CWFE2POCOAXA units are designed for shelf, card cage or stand-alone mounting, making them ideal for those installations were space is limited. The CWFE1POCOAXBM may also be DIN-rail mounted by the addition of the ComNet model DINBKT2 Adaptor Plate Kit. See **Figures A** and **B** on **Page 6** for mounting instructions.

See **Figures 1 – 9** for complete installation details.

FIGURE 1 – CWFE1POCOAXA

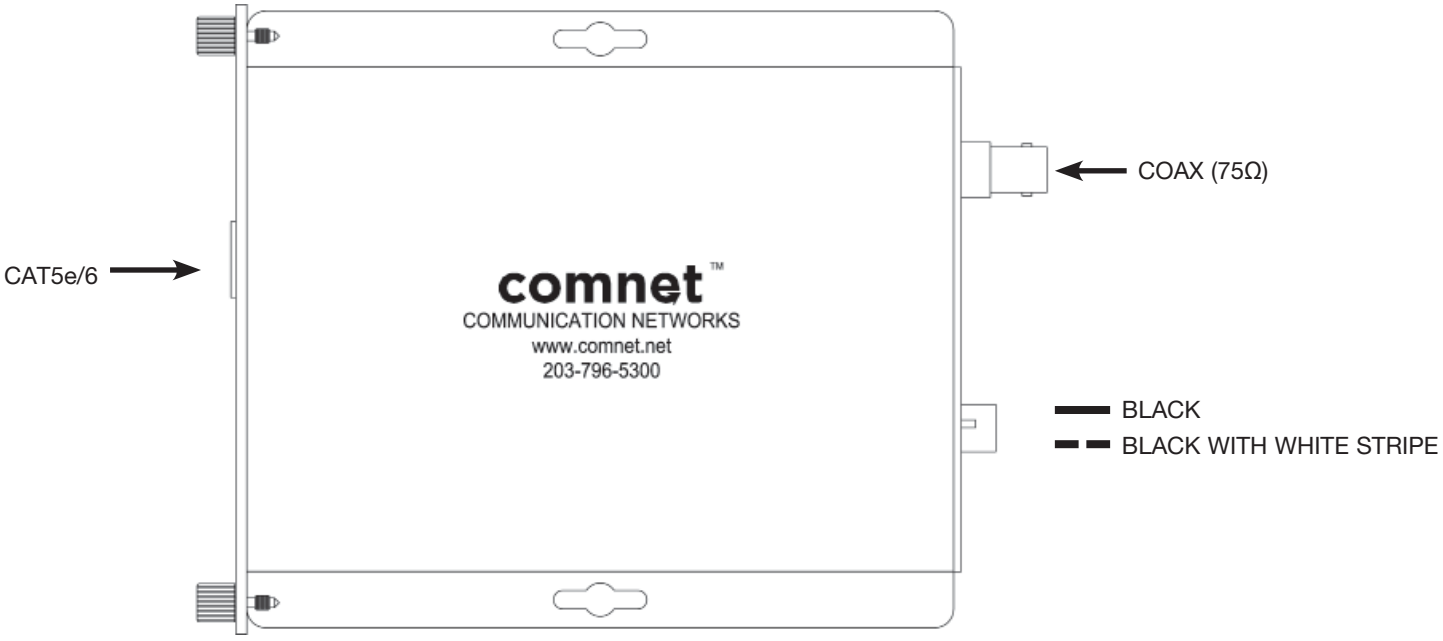


FIGURE 2 – CWFE1POCOAXA

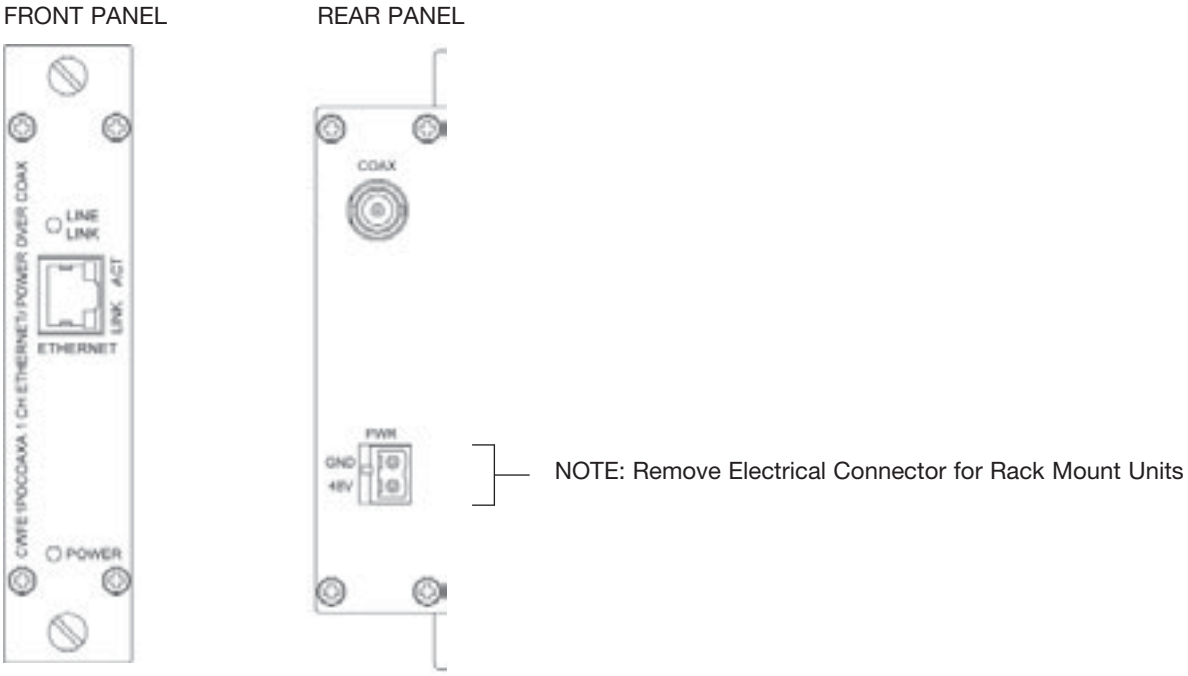


FIGURE 3 – CWFE2POCOAXA

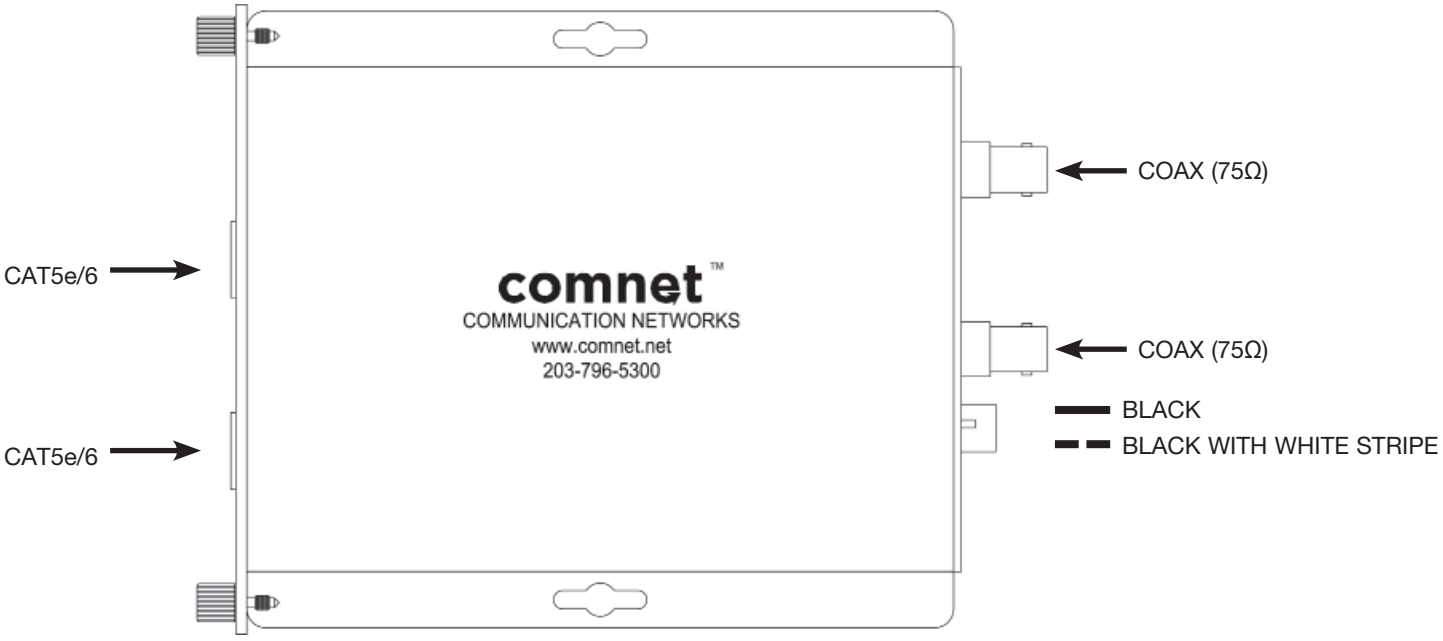


FIGURE 4 – CWFE2POCOAXA

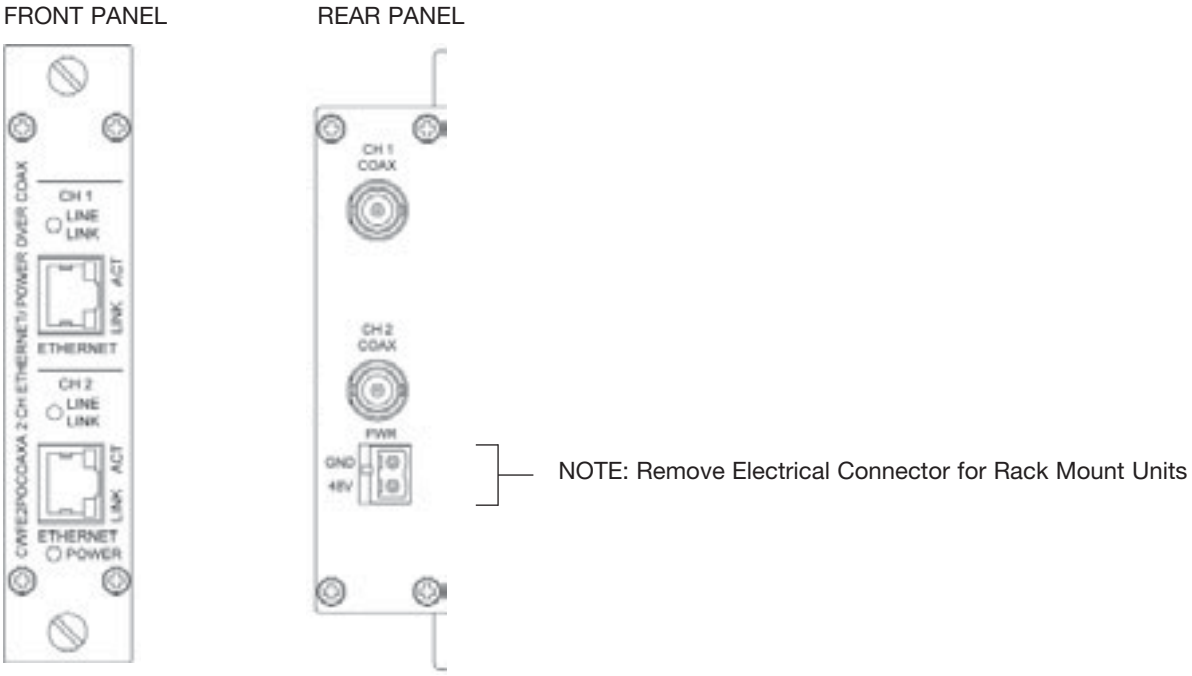


FIGURE 5 – CWFE1POCOAXBM

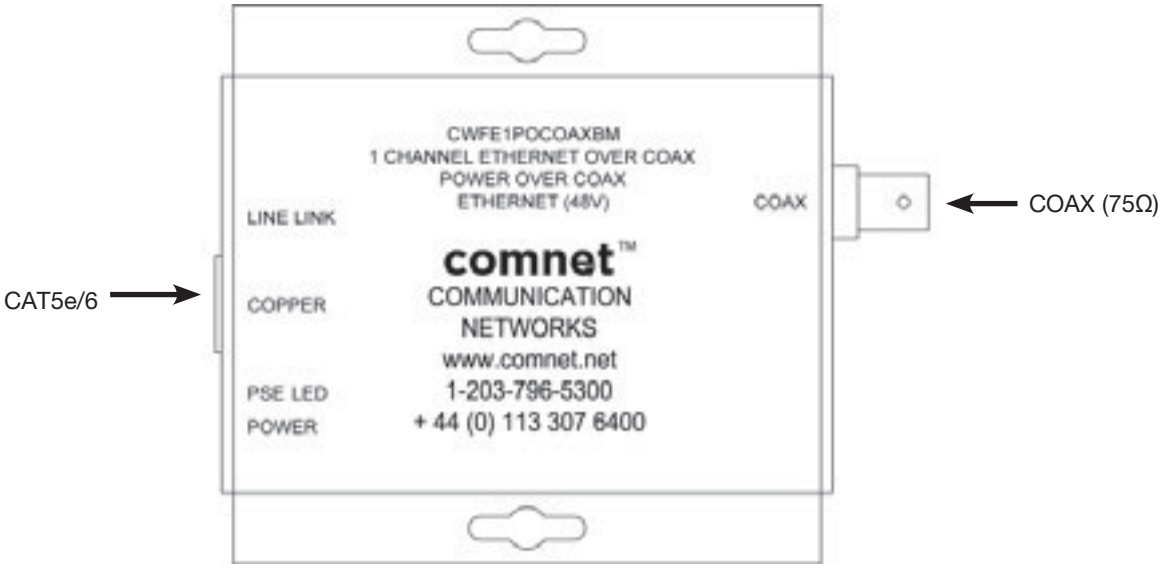


FIGURE 6 – CWFE1POCOAXBM

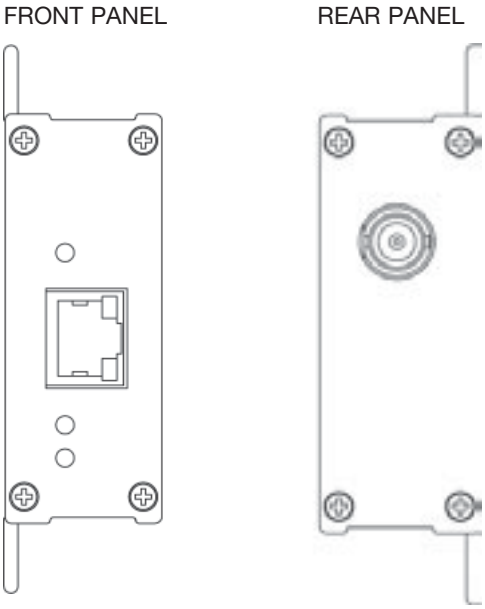


FIGURE 7 – POSSIBLE ETHERNET CONFIGURATIONS

Ethernet IEEE 802.3 Network Element determined by user.

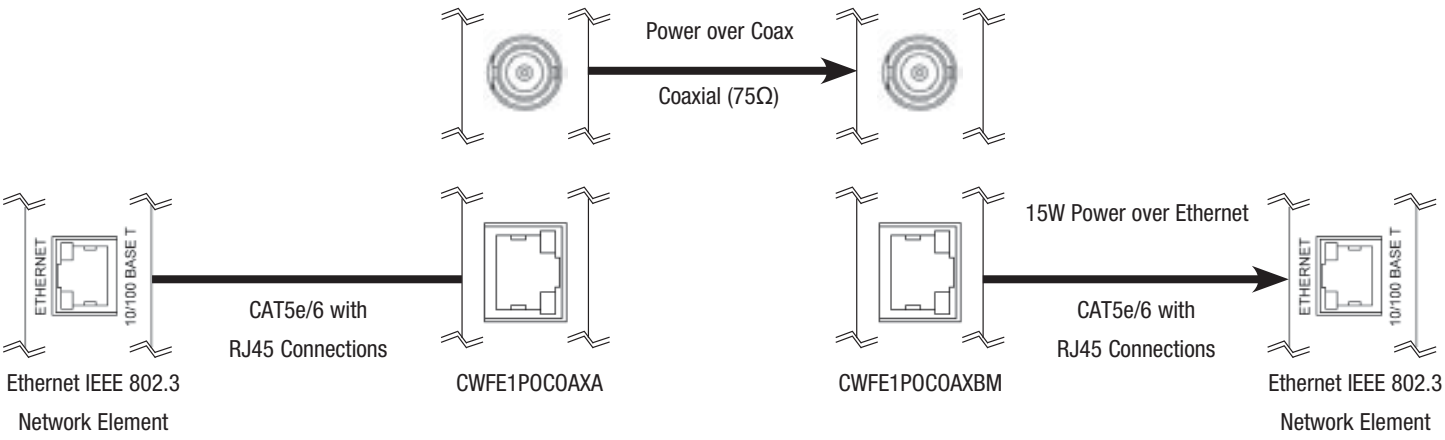


FIGURE 8 – DISTANCE VS. SPEED

Line Side Port:				
	Coax connector:	BNC		
	Impedance:	75 ohm coax		
Throughput:		(Down Stream	/	Up Stream)
	< 750 ft	100 Mbps	/	100 Mbps

FIGURE 9 – LED INDICATORS

	LINE LINK	**PSE LED** (BM Unit only)	**POWER**
GREEN	–	Power provided	Unit powered up
OFF	–	Power not provided	Unit powered down
BLINK	Coax data activity	Negotiating	–

MECHANICAL INSTALLATION INSTRUCTIONS

INSTALLATION CONSIDERATIONS

This modem is supplied as a Standalone module. Units should be installed in dry locations protected from extremes of temperature and humidity.

CAUTION: Take care not to press on any of the LEDs.

WARNING: Unit is to be used with a Listed Class 2 or LPS power supply rated 48 VDC @ 0.85A, 84 VDC @ 1.25 A.

IMPORTANT SAFEGUARDS:

A) Elevated Operating Ambient - If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient. Therefore, consideration should be given to installing the equipment in an environment compatible with the maximum ambient temperature (Tma) specified by the manufacturer.

B) Reduced Air Flow - Installation of the equipment in a rack should be such that the amount of air flow required for safe operation of the equipment is not compromised.

FIGURE A

Dimensions are for the CWFE1POCOAXBM standalone ComNet module

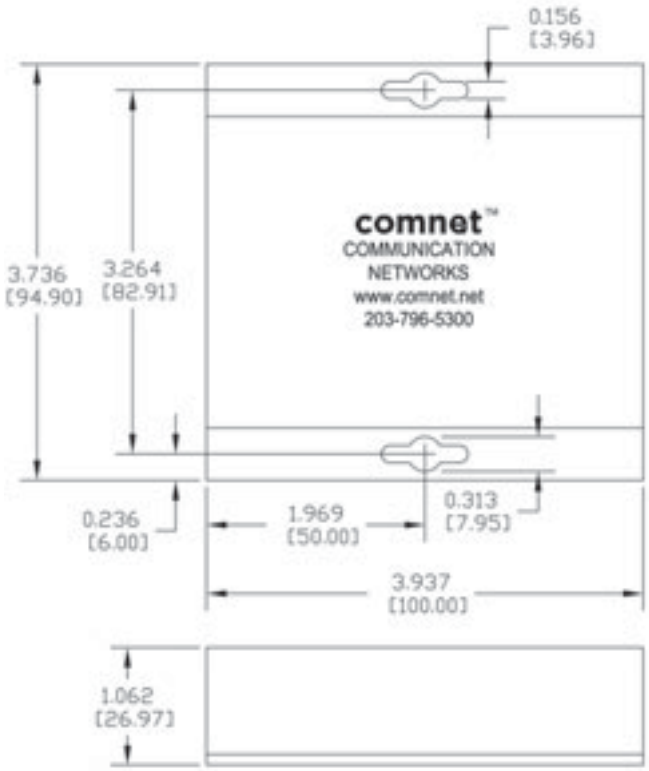
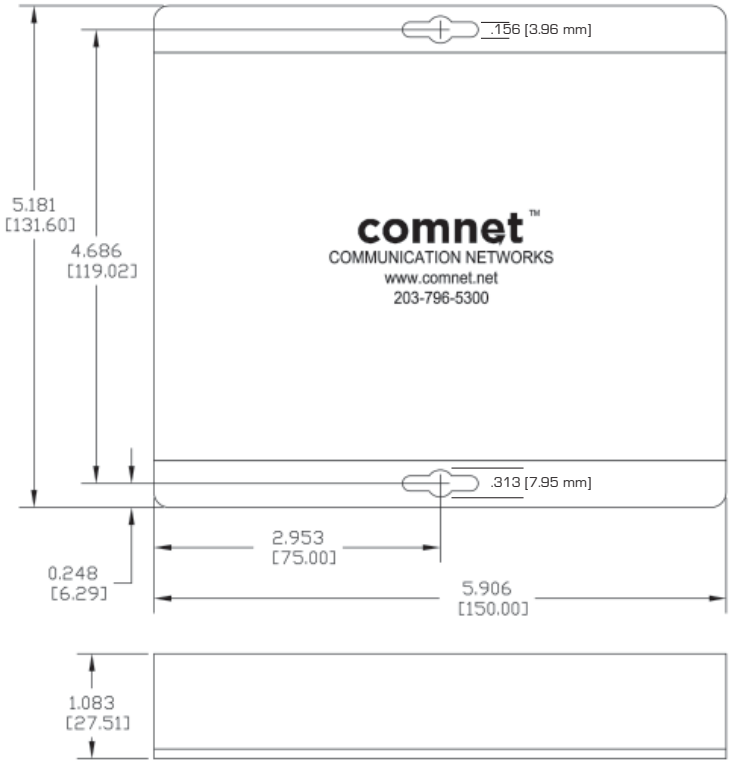


FIGURE B

Dimensions are for a standard ComNet™ one slot module



MADE IN THE USA

comnet Communication Networks

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

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

© 2011 Communications Networks Corporation. All Rights Reserved. "ComNet" and the "ComNet Logo" are registered trademarks of Communication Networks, LLC.