75° **-40°**
HARDENED

ETHERNET
6+2

PoE
30W

The ComNet™ CNFE6+2USPOE provides 8 Ethernet ports operating at 10/100Mbps and is designed to combine six electrical ports into a second optical port that forwards this data to the next CNFE6+2USPOE. The optical ports are designed to forward the data from the six electrical ports to the next switch, to a PC, or another Ethernet connection. In addition, the electrical ports can supply up to thirty (30) watts of power ("Power Over Ethernet") to remote Ethernet devices. This product uses ST optical connections and can be supplied to operate over Singlemode or Multimode optical fiber. There is no programming required to use this product. The sixth (6th) electrical port can be used to monitor the data flow from the optical port to permit "local" observation and diagnostics of the equipment.

FEATURES

› No Programming Required

› 10/100 Mbps Ethernet
  • 10/100 BASE-T/TX electrical port
  • 100 BASE-FX optical port

› Electrical ports support Auto-Negotiation for 10 Mbps or 100 Mbps, full duplex or half duplex data.

› Optical port supports 100 Mbps full duplex data

› IEEE802.3af Class 1 – 3 Power over Ethernet (PoE) 30W

› Automatic MDI/MDI-X crossover

› Designed to meet full compliance with the environmental requirements (ambient operating temperature, mechanical shock, vibration, humidity with condensation, high-line/low-line voltage conditions and transient voltage protection) of NEMA TS-1/TS-2 and the Caltrans Specification for Traffic Signal Control Equipment.

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

› No in-field optical adjustments required

› Power, Activity and Port PoE status LED indicators

› Hot-swappable rack modules

› The ComNet CNFE6+2USPOE may be either wall mounted, rack mounted ("ComFit" packaging) or DIN-rail mounted with the use of the ComNet DINBKT1 adapter.

› IEEE 802.3 compliant

› Lifetime Warranty

APPLICATIONS

› 10/100 Mbps Ethernet

› High Speed Computer Links

SPECIFICATIONS

Data

Data Interface	Ethernet
Data Rate	10/100 Mbps
	IEEE 802.3 Compliant
	Full Duplex or Half Duplex Electrical Ports/Full
	Duplex Optical Port
Electrical	30 W (max)

Fibers
SC or ST, MM or SM

Connectors

Power	Terminal Block
Data	RJ45

POE Pin Assignment
RJ45 port supports IEEE802.3af
End-point Positive (VCC+): RJ45 pin 1, 2
Negative (VCC-): RJ45 pin 3, 6

LED Indicators
- Optical Link/Data Activity
- Electrical Link/Data Activity
- Power   - PoE

Power

Operating Voltage	48VDC PoE, 12–48VDC non-PoE
Current Draw	5A, with PoE, 1A w/out PoE

Electrical & Mechanical

Surface Mount	Wall or Flat Surface Screw Attachment
Number of Rack Slots	2
Current Protection	Automatic Resettable Solid-State Current Limiters
Circuit Board	Meets IPC Standard
Size (in./cm) (L×W×H)	6.1 × 5.3 × 2.2 in. (15.5 × 13.5 × 5.6 cm)
Shipping Weight	<2 lbs./0.9 kg

Environmental

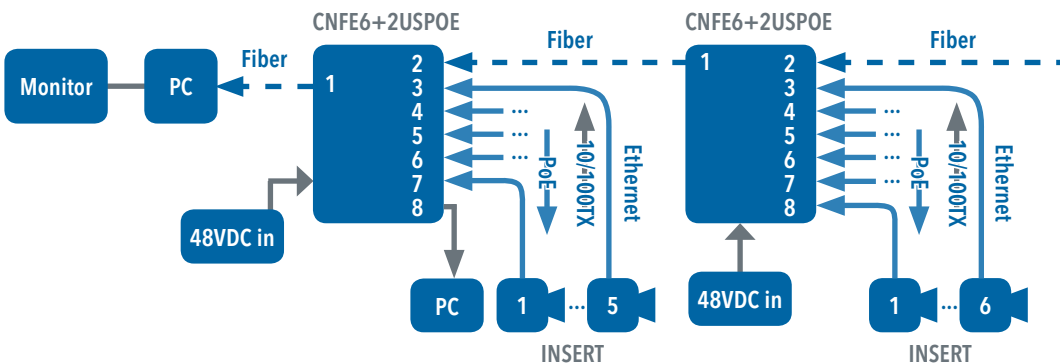|	
MTBF	>100,000 hours
Operating Temp	-40˚ C to +75˚ C
Storage Temp	-40˚ C to +85˚ C
Relative Humidity	0% to 95% (non-condensing)[1]

AGENCY COMPLIANCE

FC PART 15 COMPLIANT   CE   cULus E322911   RoHS COMPLIANT   N24621

MADE IN THE USA

ORDERING INFORMATION

Part Number	Description	Maximum Distance‡
CNFE6+2USPOE-S	8 Port 10/100 Mbps Ethernet Self-managed Switch 2FX Single mode, 6TX (PoE)	20 km (12.4 mi)
CNFE6+2USPOE-M	8 Port 10/100 Mbps Ethernet Self-managed Switch 2FX Multimode, 6TX (PoE)	3 km (1.8 mi)
Options	PS48VDC-5ADIN Recommended Power Supply for PoE Applications (Not Included)	
	PS12DC-3A-US Recommended Power Supply for non-PoE Applications (Not Included)	
	[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)	

NOTE: This product requires a fiber installation with a minimum 30 dB connector return loss. The use of Super Polish Connectors is recommended.
Complies with FDA Performance Standard for Laser Products, Title 21, Code of Federal Regulations, Subchapter J. In a continuing effort to improve and advance technology, product specifications are subject to change without notice.

TYPICAL APPLICATION

Low Power Consumption

10 Jul 2013