

10/100 Mbps Ethernet 4 port unmanaged switch  
2 Channels: Electrical ↔ 2 Channels: SFP Optical  
4 Channels: Electrical  
4 Channels: SFP Optical



## Description

The ComNet™ CNFE4US Ethernet 4 port unmanaged switch Series is designed to transmit and receive 10/100 Mbps data over optical fiber through user selectable SFP options or 10/100 Mbps data over CAT5E/6 electrical cable. This unit integrates 4 independent 10/100 Mbps channels in a single package. The CNFE4FX2TX2US and CNFE4FX4US require the ordering of sold-separately interchangeable SFP modules for fiber type, distance and connectors. The CNFE4FX2TX2US and CNFE4TX4US electrical interfaces will Auto-Negotiate to 10 Mbps, or 100 Mbps Ethernet rate without any adjustments. The optical interfaces operate at a 100 Mbps Ethernet rate. All models are environmentally hardened to operate in demanding environments. LED indicators are provided for confirming equipment operating status. Packaged in the exclusive ComNet ComFit housing, these units may be either wall or rack-mounted, or may be DIN-rail mounted by the addition of ComNet model DINBKT1 adaptor plate.

## Applications

- 10/100 Mbps Ethernet
- High Speed Computer Links

## Features

- 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
- 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.
- Uses interchangeable SFP for fiber type, distance and connector (Ordered separately)
- 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
- LED Indicators for Power and Activity
- IEEE 802.3 compliant
- Hot-swappable rack modules
- Interchangeable between stand-alone or rack mount use
  - ComFit
- Lifetime Warranty

(SFP) = Small Form-Factor Pluggable Module



# CNFE4US SERIES

10/100 Mbps Ethernet 4 port unmanaged switch  
 2 Channels: Electrical ↔ 2 Channels: SFP Optical  
 4 Channels: Electrical or 4 Channels: SFP Optical

## 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

### FIBERS\*

SFP Dependent

### CABLE

CAT5E/6

### FIBER CONNECTORS

Requires selection of sold-separately SFP modules. See ComNet data sheet for number and description of SFP modules

### CONNECTORS

Power: Terminal Block  
 Data: RJ45

### LED INDICATORS

- Optical Link/Data Activity
- Electrical Link/Data Activity
- Power

### ELECTRICAL & MECHANICAL

Power: 9-24 VDC @ 500 mA  
 Surface Mount: From Rack  
 Rack Mount: 1  
 Number of Rack Slots: Automatic Resettable  
 Current Protection: Solid-State Current Limiters  
 Circuit Board: Meets IPC Standard  
 Size (in./cm) (L×W×H) 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: -40° C to +75° C  
 Storage Temp: -40° C to +85° C  
 Relative Humidity: 0% to 95% (non-condensing)†

\* Multimode fiber needs to meet or exceed fiber standard ITU-T G.651. Single mode fiber needs to meet or exceed fiber standard ITU-T G.652

† May be extended to condensation conditions



| PART NUMBER   | DESCRIPTION   | DISTANCE  |
|---------------|---|---|
| CNFE4FX2TX2US | 4 Port 10/100 Mbps Ethernet Unmanaged Switch; 2 FX, 2 TX  | See SFP Modules data sheet for optional distances, fiber type and connector type. |
| CNFE4FX4US    | 4 Port 100 Mbps Ethernet Unmanaged Switch; 4 FX   |   |
| CNFE4TX4US    | 4 Port 10/100 Mbps Ethernet Unmanaged Switch; 4 TX  | 100 m (330 feet)  |
| Accessories   | 9 Volt DC Plug-in Power Supply, 90-264 VAC, 50/60 Hz (Included)   |   |
| Options       | Add suffix '/C' for Conformally Coated Circuit Boards (Extra charge, consult factory)<br>Small Form-Factor Pluggable Modules (See SFP Data sheet)<br>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.



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