

# 10/100/1000 Mbps Drop/Insert/Repeat Gigabit Uplink Switch with Optional PoE+

# CNGE2FE4SMS[POE][HO]

















The ComNet™ CNGE2FE4SMS[POE][HO] is a six-port self-managed switch with uplink management functionality and provides 4 copper ports operating at 10/100 Mbps and two Gbps optical SFP\* ports. It is designed to combine four electrical ports and one Gbps SFP port into one of two optical SFP ports. The CNGE2FE4SMS[POE][HO] SFP ports forwards this data to the next network device or can be configured for drop and insert operation. The CNGE2FE4SMS[POE][HO] uses ComNet SFPs for connector and distance options. There is no programming required to use this product. The ComNet CNGE2FE4SMS[POE][HO] comes pre-programmed, preventing network video flooding with dip switch selection of fiber ports as uplink or as an unmanaged switch. Ports 1 to 4 can supply up to thirty (30) watts of power ("Power over Ethernet") per port based on the IEEE 802.3at standard. An optional High Output (HO) version is also available that can supply up to thirty (30) watts of PoE from ports 1 and 2 and up to sixty (60) watts of PoE from ports 3 and 4.

## **FEATURES**

- > No Programming Required
- > 10/100/1000 Mbps Ethernet
- 10/100 BASE-T/TX electrical ports
- 1000 BASE-FX SFP ports for Gigabit operation
- Electrical ports support Auto-Negotiation for 10 Mbps or 100 Mbps, full duplex or half duplex data.
- > Optical port supports 1000 Mbps full duplex data
- > IEEE802.3at Power over Ethernet (PoE+)\*
- $\rightarrow$  Up to 30 W PoE+ on Ports 1 and 2<sup>t</sup> Up to 60 W PoE+ on Ports 3 and 4<sup>t</sup>
- > Automatic MDI/MDI-X crossover
- Designed to meet full compliance with the environmental requirements (ambient operating temperature, mechanical shock, vibration, humidity with condensation, highline/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 protection from power surges and other voltage transient events.
- > No in-field optical adjustments required
- > Power, Activity and Port PoE status LED indicators confirm operating status of this device
- > Hot-swappable rack modules
- → IEEE 802.3 compliant
- > Lifetime Warranty

## **APPLICATIONS**

- > 10/100/1000 Mbps Ethernet
- > High Speed Computer Links
- > IP Video
- \* SFP = Small Form-Factor Pluggable Module
- † CNGE2FE4SMSPOE or CNGE2FE4SMSPOEHO models only

# 10/100/1000 Mbps Drop/Insert/Repeat Gigabit Uplink Switch with Optional PoE+

## **SPECIFICATIONS**

**Data Interface** Ethernet

Data Rate 10/100/1000 Mbps IEEE 802.3 Compliant

Full Duplex or Half Duplex Electrical Ports/Full

**Duplex Optical Port** 

Electrical CNGE2FE4SMSPOE Ports 1 - 4: 30 W Max

CNGE2FE4SMSPOEHO Ports 1 and 2: 30 W Max

CNGE2FE4SMSPOEHO Ports 3 and 4: 60 W Max

Fibers<sup>1</sup> SFP Dependent

**Connectors** 

Optical Requires selection of sold-separately SFP

modules. See ComNet data sheet for number

and description of SFP modules.

Power Terminal Block Data RJ45

**POE Pin Assignment** RJ45 port supports IEEE802.3at

End-point Positive (VCC+): RJ45 pin 1, 2 (RJ45 pin 1,2 and 4,5 on 60W ports)

Negative (VCC-): RJ45 pin 3, 6 (RJ45 pin 3,6 and 7,8 on 60W ports) **LED Indicators** 

- Optical Link/Data Activity

- Electrical Link/Data Activity

- Power - PoE

**Power** 

48 to 57 VDC PoE, 12 to 24 VDC non-PoE **Operating Voltage** 

5A max, with PoE, 1A w/out PoE **Current Draw** 

**Electrical & Mechanical** 

**Surface Mount** Wall or Flat Surface Screw Attachment

**Current Protection** Automatic Resettable Solid-State Current Limiters

Meets IPC Standard Circuit Board

 $6.1 \times 5.3 \times 1.1$  in  $(15.5 \times 13.5 \times 2.8$  cm) Size

Shipping Weight <2 lbs./0.9 kg

**Environmental** 

MTBF >100,000 hours **Operating Temp** -40° C to +75° C -40° C to +85° C Storage Temp

0% to 95% (non-condensing)1 Relative Humidity











## ORDERING INFORMATION

Part Number	Description
CNGE2FE4SMS	6 Port Gigabit and 10/100 Mbps Ethernet Self-managed Switch 2 SFP FX, 4TX
CNGE2FE4SMSPOE	6 Port Gigabit and 10/100 Mbps Ethernet Self-managed Switch 2 SFP FX, 4TX with 30W of PoE+ power
CNGE2FE4SMSPOEHO	6 Port Gigabit and 10/100 Mbps Ethernet Self-managed Switch, 2 SFP FX, 2TX with 60W of PoE+ power, 2TX with 30W of PoE+ power
Included Accessories	DC Plug-in Power Supply, 90-264 VAC, 50-60 Hz (included with CNGE2FE4SMS only)
Options	Power Supply for PoE Models (Extra charge, order model PS48VDC-5ADIN) [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 or DINBKT4)

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





