75° −40° HARDENED	SFP FLEXIBILITY	ETHERNET 4+2	PoE 30W†	PoE 60W†

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

FEATURES

› No Programming Required

› 10/100 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+)†

› Up to 60 W PoE+ on Ports 1 and 2†
  Up to 30 W PoE+ on Ports 3 and 4†

› 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 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

† POE Model Only. Order part CNGE2FE4SMSPOE.

SPECIFICATIONS

Data

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 and 2: 60 W Max
	CNGE2FE4SMSPOE Ports 3 and 4: 30 W Max

Fibers[1]

	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
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
Current Protection	Automatic Resettable 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)[1]

AGENCY COMPLIANCE

FC PART 15 COMPLIANT   CE   c UL us E322911   RoHS COMPLIANT   C N24621

MADE IN THE USA

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
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 Jan 2014