



-40° TO +75° C



FLEXIBILITY



ALL GIGABIT



30W†



2FX + 4TX

The ComNet CNGE6FX2TX4POE is a hardened six port PoE+ switch. It provides four 10/100/1000Base-T(X) copper ports plus one TX/SFP\* combo port and one 100/1000Base-FX SFP ports. Ports 1 through 4 can optionally supply up to thirty (30) watts of power per port based on the IEEE 802.3af/at standard. It is designed for 48-56VDC input sources for IP surveillance, traffic monitoring, and a broad range of other applications. It can also be daisy-chained to other devices to cover wider areas using the two fiber ports.

## FEATURES

- › 10/100/1000 Mbps Ethernet
  - 4 × 10/100/1000 BASE-T/TX electrical ports
  - 1 × Combo Port
  - 1 × 100/1000 BASE-X SFP port
- › Electrical ports support Auto-Negotiation for 10Mbps, 100Mbps or 1000Mbps, full duplex or half duplex data.
- › SFP Ports support 100 or 1000 Mbps full duplex data
- › IEEE802.3at Power over Ethernet (PoE+)
- › Automatic MDI/MDI-X crossover
- › Voltage transient protection on all power and signal input/output lines provides protection from power surges and other voltage transient events.
- › Redundant DC inputs for uninterrupted operation in the event of a loss of operating power or a power supply failure
- › Supports alarm relay
- › Daisy-chain through two built-in SFP ports
- › Lifetime Warranty

## APPLICATIONS

- › 10/100/1000 Mbps Ethernet
- › Perimeter Protection Surveillance Systems
- › Traffic monitoring
- › IP Video

\* SFP = Small Form-Factor Pluggable Module

## 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	Ports 1-4: 30 W Max

### Connectors

Optical <sup>1</sup>	Requires selection of sold-separately SFP modules. See ComNet data sheet for number and description of SFP modules.
Power Data	Terminal Block RJ45

### Switch Properties

Switching Latency	7 μs
Switching Bandwidth	12 Gbps
Processing	Store-and-Forward
Jumbo Frame	91e B

### Alarm Relay

Response Time	25ms typical (network dependent)
Type	Form A contacts (Rated 1A @ 24 VDC, non-resistive loads)

### Power

Operating Voltage	Dual 48 to 56 VDC PoE
Power Consumption	6W max w/out PoE
Current Protection	Reverse Polarity Protection

### PoE Pin Assignment

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

### Electrical & Mechanical

Indicating LEDs	Optical Link/Data Activity Electrical Link/Data Activity Power PoE Status
Size	5.6 × 1.4 × 4.1 in (14.2 × 3.6 × 10.4 cm)
Surface Mount	Wall or Flat Surface Screw Attachment
Shipping Weight	<2 lb / 0.9 kg

### Environmental

MTBF	>100,000 hours
Operating Temp	-40° C to +75° C
Storage Temp	-40° C to +85° C
Relative Humidity	5% to 95% (non-condensing) <sup>2</sup>

### Ethernet Standards

IEEE 802.3 for 10BASE-T  
 IEEE 802.3u for 100BASE-TX  
 IEEE 802.3z for 1000BASE-X  
 IEEE 802.3ab for 1000BASE-T  
 IEEE 802.3af for PoE  
 IEEE 802.3at for PoE+  
 IEEE 802.3x Flow Control and Back Pressure

### Certifications

Safety	UL 60950-1
Safety	LVD (EN62368-1)
EMC/EMS	CE, FCC, VCCI
EMI	FCC Part 15 Subpart B Class A
EN 60068-2-6	Vibration
EN 60068-2-27	Shock
EN 60068-2-32	Free Fall



## ORDERING INFORMATION

Part Number	Description
CNGE6FX2TX4POE	Small Surface Mount 6 Port Gigabit Ethernet Self-managed Switch 2 SFP FX, 4TX with 30W of PoE+ power
Options	Power Supply - Extra charge, consult factory User-selection of SFP or CopperLine CL-SFP modules (Extra charge, see SFP data sheets for product numbers and compatibility before ordering)

NOTE: Specifications are subject to change without notice.