CNGE6FX2TX4MSP

L2+ Managed 4 x 10/100/1000 PoE+ & 2 x FX/GbE SFP Switch

Description

CNGE6FX2TX4MSP managed industrial switch is a Power Source Equipment (PSE) device engineered with rugged hardware to meet the high reliability requirements of Industrial or Outdoor PoE applications. Built in a well-protected IP30 aluminium housing, the switch withstands wide operating temperatures ranging from -40°C to 75°C and operates consistently even in harsh industrial environments. The CNGE6FX2TX4MSP supports QoS, IGMP snooping, SFP DDMI, PoE and other device management features to fulfill the needs of high performance managed surveillance networks.

PoE+ function on 4-10/100/1000 copper ports of the CNGE6FX2TX4MSP complies with IEEE 802.3at standards and allows them to supply up to 30W per port for network attached powered devices such as WLAN Access Points, VoIP phones and IP surveillance cameras. Two gigabit fiber slots can be configured as dual fiber ring ports to quickly recover network failures and provide an easy way to establish redundant gigabit network. Thus, CNGE6FX2TX4MSP ensures a reliable and highly available managed industrial networks while delivering all the benefits of PoE power.

RoHS CE FC

30W PoE+ | ALL GIGABIT | FLEXIBILITY | HARDENED
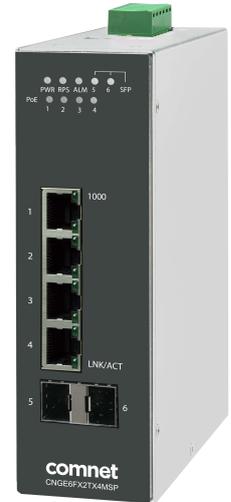
Feature Highlights

Robust Performance and Protection

Well-protected in an IP30 aluminium casing, the switch provides high level of immunity against EMI and EMS found in industrial environments. Along with those, the CNGE6FX2TX4MSP is built with various protection features such as ESD Protection, Surge Protection, Over Current Protection, Reverse Polarity Protection and Short Circuit Protection to ensure continuous operation of mission-critical applications even in unstable power conditions.

High-Power Budget for PoE Network Devices

To fulfill the growing demand of high-bandwidth, high-power PoE+ for network applications and eliminating the cost of electrical cabling and circuits, the CNGE6FX2TX4MSP is designed under IEEE 802.3at standard PoE plus. With 120W PoE power budget capability for the whole system, the switch allows simple "plug and play" PoE for various types of high power consuming PoE devices. This makes the CNGE6FX2TX4MSP a very convenient solution for applications far away from power outlets satisfying PoE extension applications in much longer distances.
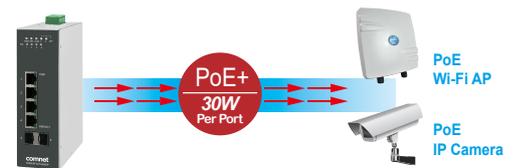
Innovative PoE+ for Powered Devices

The CNGE6FX2TX4MSP is designed with intelligent PoE+ features to utilize power more efficiently. With user-configurable power budget limit feature, the switch limits power output to devices to ensure that power consumption does not exceed user defined parameters. And to monitor real-time status of PDs, the switch sends alive-checking packets to PDs. This reduces management burden and increases system reliability. Using power scheduling mechanism of the switch, administrators can set power on each port to a desired hourly/weekly schedule and can enable or disable the power output to these devices accordingly.

PoE Scheduling

PoE Alive-Checking

Feature Highlights

Future-proof Fiber Connectivity with Dual SFP Ports

With two gigabit fiber slots, the CNGE6FX2TX4MSP easily establishes fiber channel for gigabit Ethernet connectivity and allows you to take advantage of fiber based daisy chain topologies. The switch provides long distance, high-speed fiber connectivity while offering enhanced noise immunity and data security across deployed systems. The CNGE6FX2TX4MSP is a well-suited robust, cost-effective and future-proof solution for fiber based surveillance networks.

Efficient network monitoring and proactive capability

The CNGE6FX2TX4MSP supports the most accepted and enhanced traffic management, monitoring and analysis protocols such as SNMP and RMON. SNMPv1/v2c allows end users to centrally manage different levels in a network and RMON gives the capability to monitor the network performance. In addition, QoS, IGMP and VLAN give the capability to monitor the network performance for powered devices in surveillance applications. This avoids high OPEX and provides administrators the control they need to manage a healthy and efficient network.

Surveillance Applications

The CNGE6FX2TX4MSP combines high-power PoE+, robust performance for surveillance systems in harsh industrial environments. With small size, highly reliable and secure features ensure continuous operations in some special requirements for transportation, factory and outdoor places where high vibration degree, shock and wide range temperatures are present.
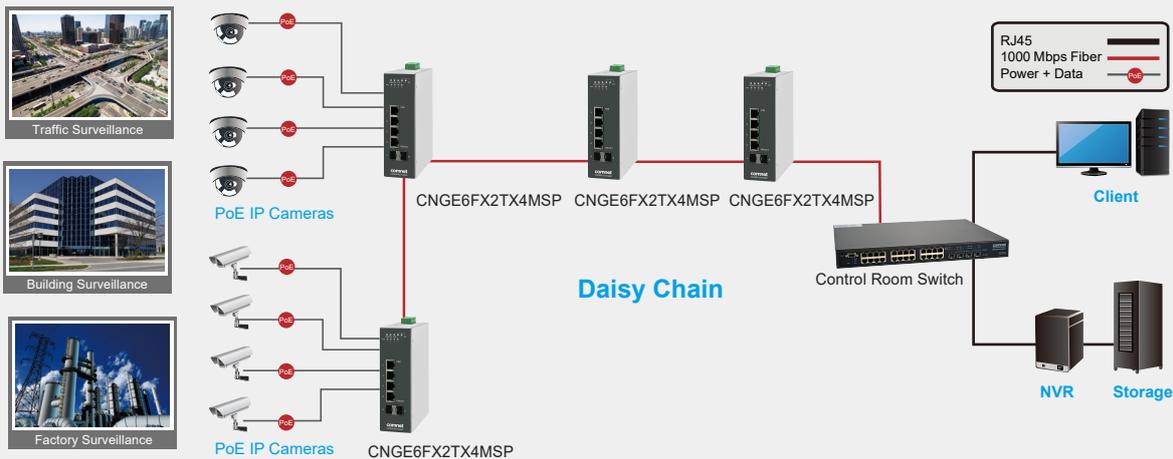
Applications

The CNGE6FX2TX4MSP is compatible with 10/100/1000Mbps through RJ45 transceivers to guarantee a strong, stable connection of Ethernet, Fast Ethernet or Gigabit Ethernet, providing flexible deployment options to satisfy surveillance networking requirements.
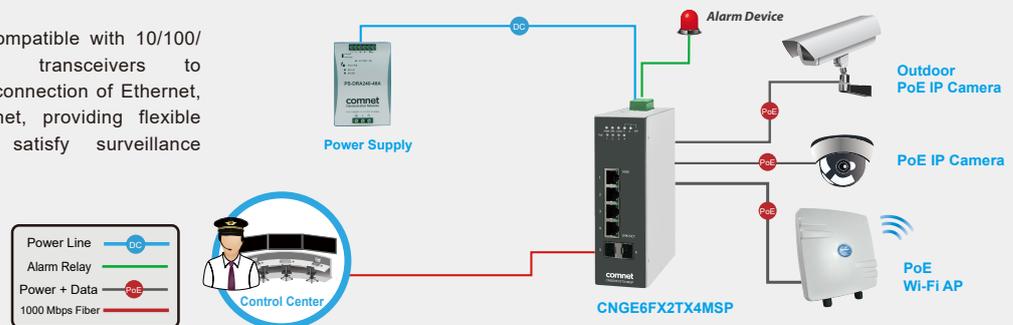
Specifications

Standards	
IEEE 802.3	10BASE-T
IEEE 802.3u	100BASE-TX
IEEE 802.3ab	1000BASE-T
IEEE 802.3u	100BASE-FX
IEEE 802.3z	1000BASE-SX/LX
IEEE 802.3	Nway Auto-negotiation
IEEE 802.3x	Flow Control
IEEE 802.3ad	Link Aggregation
IEEE 802.3af	Power over Ethernet
IEEE 802.3at	Power over Ethernet Plus
IEEE 802.3az	Energy Efficient Ethernet (EEE)
IEEE 802.1AB	LLDP
IEEE 802.1D	STP
IEEE 802.1w	RSTP
IEEE 802.1p	Class of Service
IEEE 802.1Q	VLAN Tagging
IEEE 802.1X	Port Authentication

Interface	
Ports	4 x 10/100/1000BASE-T (PoE RJ45)
	2 x GbE SFP Slots
DIP Switch	Power voltage drop alarm setting (PWR & RPS)
LED Panel	PWR, RPS, ALM, SFP, PoE, 1000, LNK/ACT

Features	
Performance	Jumbo frame Size: 10KBytes
	MAC Table Entries: 8K
	Active VLAN: 4K
	Switch Fabric: 12Gbps
	L2 Forwarding Rate: 11.9Mpps
Management	CLI, Telnet/SSH, HTTP, SNMP v1/v2c/v3, SNMP Trap, MVLAN, Firmware Upgradable, Configuration Backup/Restore, Syslog, SNTP, LLDP, DHCP Client/Relay/Option 82, e-mail Alarm, Server Control, Mirroring, DDM, SFP Info, Auto-Provisioning, EEE, RMON Statistics
Reliability	STP/RSTP, Dual Homing, LACP, Static Trunk, Code Redundancy
VLAN	IEEE 802.1Q, Port-based VLAN, MAC-based VLAN, QinQ
Traffic Control	IGMP Snooping/Throttling, QoS, Flow Control, Rate Limit, Storm Control, Traffic Monitor, Port Isolation, Loop Detection
Security	ACL, SSH, Port-based 802.1x, Port Security, MAC Search, Static MAC, DHCP Snooping, DHCP Sever Screening, ARP Inspection, BPDU Guard/Filter, Root Guard, Managed Host
PoE Functions	Scheduling, PD Alive Check, PoE Power On/OFF, Feeding Power Budget Control

Power	
Input Voltage	Primary inputs: 48~57VDC
	Redundant inputs: 48~57VDC
Connection	Teminal Block, Mini-DIN
Power Consumption	System: 10W
Alarm Relay	PoE Power Budget: 120W
	One relay output, 1A @ 24V DC

Mechanical and Environment	
Housing	Aluminum (IP30 Protection)
Mounting	DIN-Rail
Operating Temperature	-40°C~75°C (-40°F~167°F)
Storage Temperature	-40°C~85°C (-40°F~185°F)
Operating Humidity	5 to 95% RH (non-condensing)
Storage Humidity	5 to 95% RH (non-condensing)
Weight	740 g (1.6 lb)
Dimension (WxHxD)	50 x 160 x 120 mm (1.97 x 6.3 x 4.72 in)

Certifications	
EMI	FCC Part 15 Subpart B Class A EN 55022: class A EN 55011: 2009 class A EN 61000-6-4
EMS	EN 55024 EN 61000-6-2 EN 61000-4-2 (ESD) EN 61000-4-3 (RS) EN 61000-4-4 (Burst) EN 61000-4-5 (Surge) EN 61000-4-6 (CS) EN 61000-4-8 (PFMF)
Shock	IEC 60068-2-27
Freefall	IEC 60068-2-32
Vibration	IEC 60068-2-6

Ordering Information	
CNGE6FX2TX4MSP	L2+ Managed 4 x 10/100/1000 PoE+ & 2 x FX/GbE SFP Switch

Optional Accessories	
Power Supply	PS-MORD48240

Note :

* Specifications subject to change without notice.

Dimensions

DIN-Rail Kit