

Hardened Managed Layer 2+ Ethernet Switch 3 SFP Ports and 8 RJ45 Ports with Optional 30 or 60 Watt PoE



The **comnet by acre CNGE11FX3TX8MS Series** has three 100/1000Base-X SFP* ports and eight 10/100/1000Base-T(X) RJ45 ports. Two of the SFP ports support 2.5 Gbps SFPs for high speed communication in bandwidth intensive applications. All SFP ports utilize comnet by acre SFP modules for fiber and connector type and distance. An intrusion event is reported to the operator using SNMP. The series offers multiple Ethernet redundancy protocols which protect your applications from network interruptions or temporary malfunctions by redirecting transmission within the network. The comnet by acre exclusive Port Guardian feature provides additional cyber security protection by enabling physical port lockout in the event that an existing cable is disconnected and prevents a potential network incursion using common spoofing techniques. The switch provides advanced IP-based management that can limit the maximum bandwidth for each connected IP device, allowing the user to adjust usage. The CNGE11FX3TX8MSPOE provides eight RJ45 ports each supporting up to thirty watts of power. On the CNGE11FX3TX8MSPOEHO model, four of the eight PoE ports can support up to sixty watts of PoE power. All PoE ports are IEEE802.3at compliant.

Key Features

- ✓ 3 × 100/1000Base-X SFP
8 × 10/100/1000Base-T(X) RJ45
- ✓ 2 × SFP ports support 2.5 Gbps SFP modules for high speed communication
- ✓ CNGE11FX3TX8MSPOE provides 8 × IEEE802.3af/at compliant ports
- ✓ CNGE11FX3TX8MSPOEHO provides 4 × IEEE802.3af/atcompliant ports and 4 × dual IEEE802.3at PoE 60 W ports
- ✓ CNGE11FX3TX8MSPOE/24 provides IEEE802.3at from 24 VDC input
- ✓ Fast Redundancy/Recovery – MSTP/RSTP/STP (IEEE802.1s/w/D) and ERPS G.8032
- ✓ Supports static routing
- ✓ Supports IPV6
- ✓ Provided HTTPS/SSH protocol enhances network security
- ✓ Supports Device Binding security function
- ✓ Supports SNMP v1/v2c/v3 & RMON & 802.1Q VLAN Network Management
- ✓ Supports ACL, 802.1x User Authentication for security
- ✓ Supports 9.6K Bytes Jumbo Frame
- ✓ Web-based, Telnet and Console (CLI) configuration, and Windows-based monitoring
- ✓ Designed for wall or DIN rail mount installations
- ✓ Limited Lifetime Warranty



Software Features

- ✓ Port Guardian prevents network intrusion through intelligent physical port lockout
- ✓ STP/RSTP/MSTP (IEEE 802.1D/w/s)
- ✓ Ethernet Ring Protection Switching (ERPS) (G.8032)
- ✓ Quality of Service (802.1p) for real-time traffic
- ✓ VLAN (802.1Q) with VLAN tagging and GVRP supported
- ✓ IGMP v2/v3 (IGMP snooping support) and MLD v1/v2 for filtering multicast traffic
- ✓ Supports IP-based bandwidth management
- ✓ Supports application-based QoS management
- ✓ Port configuration, status, statistics, monitoring, security
- ✓ DHCP Client/Server, DHCP Snooping, DHCP Relay
- ✓ Custom User Access Rights (15 Levels)
- ✓ Static and LACP Link Aggregation
- ✓ Supports Loop Protection function
- ✓ Multicast VLAN Registration (MVR)
- ✓ Supports IP Multicast Profile (IPMC)
- ✓ Link Layer Discovery Protocol (LLDP)
- ✓ Voice VLAN support
- ✓ UPNP (universal plug and play)

* Small Form-Factor Pluggable Module. Sold separately.

Specifications

CONNECTORS

10/100/1000BASE-T(X) PORTS

8 × RJ45

100/1000BASE-X PORTS

3 X SFP (2 SFP SUPPORT UP TO 2.5 GBPS)

SERIAL CONSOLE PORT

USB TYPE B CONNECTOR (115200 BPS, 8, N, 1, N)

POWER

2 × 2-PIN TERMINAL BLOCK

FAULT RELAY

3-PIN TERMINAL BLOCK

SWITCH PROPERTIES

SWITCHING LATENCY	7 μ S
SWITCHING BANDWIDTH	28 GBPS
DRAM	1GB
FLASH	128MB
VLANS	VOICE, PRIVATE, MULTICAST
MAX. AVAILABLE VLANS	256
IGMP MULTICAST GROUPS	128 FOR EACH VLAN
PORT RATE LIMITING	USER DEFINED
PROCESSING	STORE-AND-FORWARD
PRIORITY QUEUES	8 PER PORT
NETWORK REDUNDANCY	STP, RSTP, MSTP, ERPS
MAC TABLE	8K MAC ADDRESSES
JUMBO FRAME	UP TO 9.6K BYTES
STATIC ROUTING	32 ROUTES

SECURITY

FEATURES	<p>DEVICE BINDING SECURITY FEATURE ENABLE/DISABLE PORTS, MAC BASED PORT SECURITY</p> <p>PORT BASED NETWORK ACCESS CONTROL (802.1X)</p> <p>VLAN (802.1Q)</p> <p>RADIUS CENTRALIZED PASSWORD MANAGEMENT</p> <p>SNMPV2/V3</p> <p>HTTPS / SSH ENHANCE NETWORK SECURITY</p> <p>SWITCH/PORT BASED, NAS, ACL, ARP INSPECTION AND IP SOURCEGUARD AAA</p> <p>RADIUS SERVER AUTHENTICATION</p> <p>TACACS+</p> <p>SNTP</p>
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POWER

INPUT POWER	<p>REDUNDANT 12 TO 57 VDC (NON-PoE MODEL)</p> <p>REDUNDANT 24 VDC (PoE/24 MODEL)</p> <p>REDUNDANT 48 TO 57 VDC (PoE & PoEHO MODELS)</p>
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POE POWER BUDGET

240 W (PoE MODEL)	
140 W (POE/24 MODEL)	
360 W (PoEHO MODEL)	
OVERLOAD CURRENT PROTECTION	PRESENT
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RESIDUAL RUNNING POWER	8 W MAX

MECHANICAL

INDICATOR LEDS	POWER/FAULT ALARM SFP PORT	RJ45 PORT POE
SIZE (H x W x D)	6.0 x 3.5 x 4.5 IN (153 X 89 X 115 MM)	
INSTALLATION	35 MM DIN RAIL (DIN 3 OR TS35), 7.5 MM OR 15 MM DEPTH OR WALL MOUNT	
WEIGHT	2.6 LB / 1.2 KG	

ENVIRONMENTAL

STORAGE TEMPERATURE	-40 TO 85° C
OPERATING TEMPERATURE	-40 TO +75° C
OPERATING RELATIVE HUMIDITY	5% TO 95% NON-CONDENSING
MTBF	>100,000 HOURS

ETHERNET STANDARDS

IEEE 802.3 FOR 10BASE-T

IEEE 802.3U FOR 100BASE-TX AND 100BASE-FX

IEEE 802.3AB FOR 1000BASE-T

IEEE 802.3Z FOR 1000BASE-X

IEEE 802.3X FOR FLOW CONTROL

IEEE 802.3AD FOR LACP

IEEE 802.3AT

IEEE 802.1P FOR COS

IEEE 802.1Q FOR VLAN TAGGING

IEEE 802.1D FOR STP

IEEE 802.1W FOR RSTP

IEEE 802.1S FOR MSTP

IEEE 802.1X

IEEE 802.1AB FOR LLDP

IEEE 802.3AZ EEE

ITU-T G.8032V1/V2 (ERPS)

REGULATORY COMPLIANCE

EMI	FCC PART 15, CISPR (EN55022) CLASS A
EMS	EN61000-4-2 (ESD), EN61000-4-3 (RS), EN61000-4-4 (EFT), EN61000-4-5 (SURGE), EN61000-4-6 (CS), EN61000-4-8, EN61000-4-11
SHOCK	IEC60068-2-27
FREE FALL	IEC60068-2-32
VIBRATION	IEC60068-2-6
SAFETY	EN60950-1
RAIL	EN50121-4
TRAFFIC	NEMA TS1/TS2

Ordering Information

PART NUMBER	DESCRIPTION	SFP PORTS	RJ45 PORTS	30W POE PORTS	60W POE PORTS
CNGE11FX3TX8MS	INDUSTRIALLY HARDENED 11 PORT GIGABIT MANAGED ETHERNET SWITCH	3	8	0	0
CNGE11FX3TX8MSPOE	INDUSTRIALLY HARDENED 11 PORT GIGABIT MANAGED ETHERNET SWITCH	3	8	8	0
CNGE11FX3TX8MSPOE/24	INDUSTRIALLY HARDENED 11 PORT GIGABIT MANAGED ETHERNET SWITCH, 12-24 VDC INPUT	3	8	8	0
CNGE11FX3TX8MSPOEHO	INDUSTRIALLY HARDENED 11 PORT GIGABIT MANAGED ETHERNET SWITCH	3	8	4	4
OPTIONS	Recommended Power Supply for PoE Units (Not Included, consult factory) User selection of SFP (see SFP Modules data sheet for product numbers and compatibility before ordering)				