

Environmentally Hardened Managed Layer 2+ Ethernet Switch 12 SFP* + 12 Electrical Ports with Optional 30 Watt PoE

CNGE24FX12TX12MS[POE]













IEEE802.3at

FLEXIBILITY

ALL GIGABIT

12 + 12



The ComNet CNGE24FX12TX12MS[POE] has twelve 100/1000Base-FX SFP ports and twelve 10/100/1000Base-TX ports. All SFP ports utilize ComNet SFP modules for fiber and connector type and distance. The IEEE802.3-compliant unit offers multiple Ethernet redundancy protocols (MSTP/RSTP/STP/ERPS (G.8032)) which protect your applications from network interruptions or temporary malfunctions by redirecting transmission within the network. 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 CNGE24FX12TX12MSPOE models provide twelve electrical ports supporting up to thirty watts of power. All PoE ports are IEEE 802.3at compliant.

Each model is provided with redundant power inputs which can be either one mains voltage and one or two low voltage DC inputs or two low voltage DC inputs.

FEATURES

- > 12 × 100/1000Base-FX SFP 12 × 10/100/1000Base-TX RJ45
- > CNGE24FX12TX12MSPOE provides 12 × IEEE802.3at compliant 30 W PoE+ ports
- > Multiple power supply options available including internal mains AC and/or dual external DC inputs
- > Fast Redundancy/Recovery MSTP/RSTP/STP (IEEE802.1s/w/D) and ERPS G.8032
- > Layer 3 static routing
- > Supports IPV6 new internet protocol version
- > 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
- > Multiple notifications warn of unexpected events
- > Web-based, Telnet and Console (CLI) configuration, and Windows-based (eVision) monitoring
- > Designed for desktop or 19 inch rack mount installations
- > Lifetime Warranty

SOFTWARE FEATURES

- > 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.

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SPECIFICATIONS

Connectors

10/100/1000Base-TX Ports 12 × RJ-45 100/1000Base-X Port 12 × SFP¹

Serial Console Port USB Type B Connector (115200bps, 8, N, 1)
Power IEC Input and/or 2 × 2-Pin Terminal Strip

Fault Relay 2-Pin Terminal Strip

Switch Properties

Switching latency 7 µs Switching bandwidth 54 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

Network Redundancy STP RSTP MSTP ERPS
MAC Table 8K MAC Addresses
Jumbo Frame Up to 9.6K Bytes
Static Routing 32 Routes

Security Features

Device Binding security feature

Enable/disable ports, MAC based port security Port based network access control (802.1x)

VLAN (802.10) to segregate and secure network traffic

Radius centralized password management

SNMPv3 encrypted authentication and access security

https / SSH enhance network security

Switch/port based, NAS, ACL, ARP inspection and IP sourceguard

AAA radius server authentication

TACACS+ SNTP

Power

Input Power (non-PoE) (1) 90 - 240 VAC & (1) 6 - 14 VDC or (2) 6 - 14 VDC

Input Power (PoE models) (1) 90 - 240 VAC & (2) 48 - 57 VDC

or (2) 48 - 57 VDC

Power Consumption 30 W Max (non-PoE models)

390 W Max w/PoE+ (PoE models)

Overload Current Protection Present

FC PART 15 COMPLIANT (& CUL) US ROHS



Mechanical

Indicating LEDs Status Indicators RJ45 Port Indicator

SFP Port Indicator

Size (H \times W \times D) 17 \times 10 \times 1.5 in (43.2 \times 25.4 \times 3.8 cm) Installation Desktop or 19-inch Rack Mount Weight 11 lb / 5 kg (Mains Powered Models) 7.9 lb / 3.6 kg (DC Only Powered Models)

Environmental

Storage Temperature -40 to 85 ° C

Operating Temperature -40 to +60 °C (Functional to +75° C)

Operating 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.z for 1000Base-X IEEE 802.3x for Flow control

IEEE 802.3ad for LACP (Link Aggregation Control Protocol)

IEEE 802.3at for Power Sourcing Equipment (PSE) and PoE up to 30 watts per port

(CNGE24FX12TX12MSPOE Only)
IEEE 802.1p for COS (Class of Service)

IEEE 802.1Q for VLAN Tagging

IEEE 802.1D for STP (Spanning Tree Protocol)
IEEE 802.1w for RSTP (Rapid Spanning Tree Protocol)
IEEE 802.1s for MSTP (Multiple Spanning Tree Protocol)

IEEE 802.1x for Authentication

IEEE 802.1AB for LLDP (Link Layer Discovery Protocol)

IEEE 802.3az Energy Efficient Ethernet

ITU-T G.8032v1/v2 Ethernet Ring Protection Switching (ERPS)

Regulatory Compliance

EMI FCC Part 15, CISPR (EN55022) class A

EMS EN61000-4-2 (ESD), EN61000-4-3 (RS), EN61000-4-6 (CS), 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

ORDERING INFORMATION

		SFP	RJ-45	30W PoE+
Part Number	Description	Ports ¹	Ports	Ports
CNGE24FX12TX12MS	Industrial Grade 24 Port Gigabit Managed Ethernet Switch, 1 \times Mains Input, 1 \times Low Voltage DC Input	12	12	0
CNGE24FX12TX12MS/12	Industrial Grade 24 Port Gigabit Managed Ethernet Switch, 2 \times Low Voltage DC Inputs	12	12	0
CNGE24FX12TX12MSPOE	Industrial Grade 24 Port Gigabit Managed Ethernet PoE Switch, 1 \times Mains Input, 2 \times Low Voltage DC Inputs	12	12	12
CNGE24FX12TX12MSPOE/48	Industrial Grade 24 Port Gigabit Managed Ethernet PoE Switch, 2 \times Low Voltage DC Inputs	12	12	12
Options	ComNet Recommended Power Supply (Not Included, consult factory) User selection of ComNet SFP (see SFP Modules data sheet for product numbers and compatibility before	e ordering)		

[1] Multimode fiber needs to meet or exceed fiber standard ITU-T G.651. Single mode fiber needs to meet or exceed fiber standard ITU-T G.652 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.

