

Commercial Grade Managed Layer 2+ Ethernet Switch with 20 × 100/1000Base-FX + 4 × Gigabit Combo Ports

CWGE24MS2













INCLUDED

FLEXIBILITY

ALL GIGABIT



The ComNet CWGE24MS2 has twenty 100/1000Base-FX SFP ports and four Gigabit combo ports that allow for TX or FX transmission. All SFP ports utilize ComNet SFP* modules for fiber, connector type and distance. The IEEE802.3-compliant unit offers multiple Ethernet redundancy protocols (ERPS G.8032 and MSTP/RSTP/STP) which protect your applications from network interruptions or temporary malfunctions by redirecting transmission within the network. The CWGE24MS2 implements complete Layer 2 to Layer 4 ACLs to restrict access to your sensitive network resources by filtering specific packets based on TCP/UDP ports, source and destination IP addresses or particular network devices. Furthermore, DHCP snooping, TACACS+, ARP, IEEE 802.1X and Port Security provide additional tools to manage access and levels of use of the network. These defence mechanisms of the CWGE24MS2 along with advanced DoS auto prevention deliver robust network security and enables network administrators to offer more stable services on a more secure network.

FEATURES

- > 24 Gbps Ports: 20 × 100/1000Base-FX SFP Ports 4 × Gigabit Combo Ports
- > Supports IPV6 latest internet protocol version
- > Provided SSH protocol enhances network security
- > Supports Device Binding security function
- > Internal 100-240 VAC Power Supply & 12 VDC battery **Backup Input**
- > Supports SNMP v1/v2c/v3 & RMON & 802.1Q VLAN Network Management
- > Supports L2/L3/L4 ACL, TACACS+ & 802.1x User Authentication for security
- > Supports 10K Bytes Jumbo Frame
- > Multiple notifications warn of unexpected events

- > Web-based, Telnet, Console (CLI), and Windows-based utility (eConsole) monitoring
- > Layer 3 static routing
- > Supports IEEE 1588v2 Precision Timing Protocol
- > IEEE 802.3AZ Energy Efficient Ethernet-Compliant
- > Supports LLDP Protocol
- > 19 inch rack mountable design
- > ITU-T G.8032 Ethernet Ring Protection Switching (ERPS)
- > MSTP/RSTP/STP (IEEE 802.1s/w/D)

^{*} Small Form-Factor Pluggable Module. Sold separately.

SPECIFICATIONS

Connectors

Gigabit Combo Ports $4 \times 10/100/1000$ Base-T(X) & 100/1000Base-X SFP¹

100/1000Base-X Port 20 × SFP¹

Serial Console Port RS-232 in DB9 connector with console cable.

38400bps, 8, N, 1

Switch Properties

 Switching latency
 7 μs

 Switching bandwidth
 48 Gbps

 L2 Forwarding
 35.7 Mpps

 Packet Buffer
 12 Mbit

 Max. Available VLANs
 4k

 IGMP multicast groups
 256

Port rate limiting User Defined
Processing Store-and-Forward

Priority Queues 4

Network Redundancy ERPS (G.8032) Dual Homing

STP RSTP MSTP 16K MAC Addresses Up to 10K Bytes

Jumbo Frame Enhanced Function

MAC Table

Hardware Monitor Code Redundancy Protocol-based VLAN MAC-based VLAN GARP/GVRP

IPoE (DHCP option 82) IGMP Statistics/Group Filter IGMP Message Filter

MVR (Multicast VLAN Registration)

DHCP Relay PPPoE IA VLAN Translation DHCP Option 66/67 Auto Provisioning

MLDv2 (Multicast Listener Discovery)

PTP (IEEE-1588v2) Static Route SNTP Port Alias

DHCPv6 Option 18/37 DHCPv6 Relay UDLD

Network Function

Loop detection with recover timer

Static/LACP Trunking
IGMP Snooping v1/v2/v3
VLAN Stacking (Q in Q)
DHCP Snooping
Flow Control

Network Management

Local Console

Web-based GUI

CLI through Console and Telnet

SNMP v1/v2c/v3
Port-based Mirroring
System Log
SNMP Trap
RMON
Monitor alarm
DDMI support
Firmware upgrade

Configuration Backup/Restore

Management VLAN

LLDP E-Mail Alerts

User Security

Static MAC Forwarding
ARP Inspection
ACL (L2/L3/L4)
DHCP Snooping
DoS Attack Prevention SSH
802.1x Port Authentication
MAC Anti-Spoofing
TACACS+

Traffic Management and QoS

Rate Limitation

Tag Based/Port-Based VLAN 4K Active VLAN Support 802.1p Priority Queues per port Traffic Classification Network Storm Control

QoS Scheduler SP/WRR

Commercial Grade Managed Layer 2+ Ethernet Switch with $20 \times 100/1000$ Base-FX + $4 \times$ Gigabit Combo Ports

SPECIFICATIONS

Power

Input Power 100~240 VAC at AC Input with power cord & 12VDC Battery Backup on 2-Pin Terminal Block

Power Consumption 25 Watts (without battery backup)

Overload Current Protection Present

Mechanical

Indicating LEDs Power, Post, Alarm, 1000Mb, Link/Act

Size $17.33 \times 11.18 \times 1.73$ in $(44 \times 28.4 \times 4.4$ cm)

Installation Desktop or 19-inch Rack Mount

Cooling Fan Assisted Cooling, Noise Level 56dB(A)

Weight 9.5 lb / 4.3 kg

Environmental

MTBF >100,000 hours -20° C to 70° C Storage Temperature -20° C to 60° C **Operating Temperature**

Operating Humidity 10% to 95% non-condensing

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 802.1p 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

IEEE 802.3ad VLAN Stacking

IEEE 1588-2008 Precision Time Protocol (PTP)

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-

4-4 (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 EN60950-1 Safety









ORDERING INFORMATION

100/1000Base-X Ports1 Gbps Combo Ports¹ Part Number Description CWGE24MS2 Commercial Grade 24 Port Gigabit Managed Ethernet Switch 20 4

[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.