



commercial grade 9 port gigabit managed Ethernet switch with (7) 10/100/1000TX + (2) gigabit combo SFP ports





Description

The ComNet™ CWGE9MS Managed Ethernet Switch provides transmission of (7) 10/100/1000TX and (2) Gigabit combo SFP ports. These units are available for use with either conventional CAT-5e copper or optical transmission media. Ports 1 - 7 support the 10/100/1000 Mbps Ethernet IEEE 802.3 protocol, and auto-negotiating and auto-MDI/MDIX features are provided for simplicity and ease of installation. Ports 8 - 9 are 10/100/1000 Mbps RJ45 copper ports or 1000 Mbps SFP ports for use with multimode or single mode optical fiber without need for configuration, selected by optional SFP modules. These network managed layer 2 switches are optically and electrically compatible with any IEEE 802.3 compliant Ethernet devices. Plugand-play design ensures ease of installation, and no electrical or optical adjustments are ever required. The CWGE9MS incorporates LED indicators for monitoring the operating status of the managed switch and network. One switch, or two switches positioned sideby-side, can be mounted within any standard 19-inch equipment rack using the ComNet RMB Rack Mount Bracket Adaptor Kit (sold separately).

Features

- Commercial Grade
- Ambient operating temperature range: 0° C to +50° C
- 10/100/1000 BASE-TX or 1000 BASE-FX compatible
- Flexible optics configuration via SFP plug-in modules
- Fully configurable through web-based or SNMP network management
- IGMP Snooping V1/V2 for multicast filtering and IGMP Query V1/V2
- Port based VLAN (IEEE 802.1Q)
- Rapid Spanning Tree protocol (IEEE 802.1W)
- Port Based Security
- Internal Power Supply 100-240VAC Input
- Five Year Warranty

CWGE9MS

ComWorx VL commercial grade 9 port gigabit managed Ethernet switch with (7) 10/100/1000TX + (2) gigabit combo SFP ports

specifications

benefits

System Interface/Performance

- RJ45 port support Auto MDI/MDI-X Function
- Store-and-Forward Switching Architecture
- Back-plane (Switching Fabric): 18Gbps
- 1Mbits Packet Buffer
- 8K MAC Address Table

IGMP with Query mode for Multi Media Application

VLAN

- Port Based VLAN
- Support 802.1 Q Tag VLAN
- GVRP

Spanning Tree

- Support IEEE802.1d Spanning Tree
- Support IEEE802.1w Rapid Spanning Tree

Port Trunk with LACP

X-ring

- X-ring, Dual Homing, and Couple Ring Topology
- Provide redundant backup feature and the recovery time below 300ms

QoS (Quality of Service)

- Support IEEE 802.1p Class of Service,
- Per port provides 4 priority queues
- Port Base, Tag Base and Type of Service Priority

Bandwidth Control

- Ingress Packet Filter and Egress Rate Limit
- Broadcast/Multicast Packet Filter Control

Port Mirror: Monitor traffic in switched networks.

- TX Packet only
- RX Packet only
- Both of TX and RX Packet

System Event Log

- System Log Server/Client
- SMTP e-mail Alert

Security

- Port Security: MAC address entries/filter
- IP Security: IP address security management to prevent unauthorized intruder.
- Login Security: IEEE802.1X/RADIUS

SNMP Trap

- Device cold start
- Authentication failure
- X-ring topology changed
- Port Link up/Link down
- Power Status

TFTP Firmware Upgrade and System Configure Restore and Backup

IEEE Standards IEEE802.3 10BASE-T

> IEEE802.3u 100BASE-TX IEEE802.3z Gigabit fiber IEEE802.3ab 1000Base-T

IEEE802.3x Flow Control and Back Pressure

IEEE802.3ad Port Trunk with LACP IEEE802.1d Spanning Tree Protocol IEEE802.1w Rapid Spanning Tree IEEE802.1p Class of Service IEEE802.1q VLAN Tagging IEEE 802.1x User Authentication

specifications

hardware specifications

Switch Architecture Back-plane (Switching Fabric): 18Gbps

Packet throughput ability (Full-Duplex):

26.7Mpps @64bytes

14,880pps for Ethernet port **Transfer Rate**

148,800pps for Fast Ethernet port

1,488,000pps for Gigabit Ethernet port

Packet Buffer 1Mbits

Mac Address 8K MAC address table

Flash ROM 4Mbytes **DRAM** 32Mbvtes

Connector $10/100/1000TX: 7 \times RJ45$ with Auto MDI/

MDI-X function

Gigabit fiber: 2 × SFP* socket Console port: RS232 connector

Network Cable 10Base-T: 2-pair UTP/STP Cat. 3, 4, 5 cable

EIA/TIA-568 100-ohm (100m)

100Base-TX: 2-pair UTP/STP Cat. 5 / 5E

cable

EIA/TIA-568 100-ohm (100m)

Protocol CSMA/CD

LED Per unit: Power (Green)

Per port: Link/Activity (Green),

speed 1000(Green)

Mini GBIC: Link/Activity (Green)

Power Supply 100 ~240VAC, 50/60Hz internal

Power Consumption 19.3 Watts

Operating Humidity 5% to 95% (Non-condensing)

Operating Temperature 0° to 50°C **Storage Temperature** -40° to 70°C

Case Dimension $8.5 \times 5.5 \times 1.7$ inches

 $217\text{mm} \times 140\text{mm} \times 43\text{mm}$

Fan Number

Installation 10" Rack Mountable **EMI** FCC Class A. CE Safety UL, cUL, CE/EN60950-1

software features

Management SNMP v1 v2c, v3/ Web/Telnet/CLI Management

SNMP MIB RFC 1215 Trap, RFC1213 MIBII, RFC 1157 SNMP

MIB, RFC 1493 Bridge MIB, RFC 2674 VLAN MIB, RFC 1643, RFC 1757, RSTP MIB, Private MIB

VLAN Port Based VLAN

> IEEE 802.1Q Tag VLAN (256 entries)/ VLAN ID (Up to 4K, VLAN ID can be assigned from 1 to 4094.)

GVRP (256 Groups)

Port Trunk with LACP

LACP Port Trunk: 4 Trunk groups/Maximum 4 trunk

Spanning Tree Support IEEE802.1d Spanning Tree and

IEEE802.1w Rapid Spanning Tree

X-ring Support X-ring, Dual Homing, and Couple Ring

Provide redundant backup feature and the recovery

time below 300ms

Quality of Service The quality of service determined by port, Tag and

IPv4 Type of service, IPv4/ IPv6Different Service

Class of Service Support IEEE802.1p class of service, per port

provides 4 priority queues

Port Security Support 100 entries of MAC address for static MAC

and another 100 for MAC filter

Port Mirror Support 3 mirroring types: "RX, TX and Both

IGMP Support IGMP snooping v1,v2

256 multicast groups and IGMP query

IP Security Support 10 IP addresses that have permission to

access the switch management and to prevent

unauthorized intruder.

Support IEEE802.1X Authentication/RADIUS **Login Security**

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.



^{*} 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

specifications

software features, cont'd

Bandwidth Control

Support ingress packet filter and egress packet

limit

The egress rate control supports all of packet type

and the limit rates are 100K~250Mbps Ingress filter packet type combination rules are Broadcast/Multicast/Unknown Unicast packet, Broadcast/Multicast packet, Broadcast packet only and all of packet. The packet filter rate can be set

from 100k to 250Mbps

Flow Control Support Flow Control for Full-duplex and Back

Pressure for Half-duplex

System Log Support System log record and remote system log

server

SMTP Support SMTP Server and 6 e-mail accounts for

receiving event alert

SNMP Trap Up to 3 Trap stations

DHCP

Cold start, Port link up, Port link down, Authentication Failure, Private Trap for power

status, X-ring topology change Provide DHCP Client/ DHCP Server

DNS Provide DNS client feature and support Primary

and Secondary DNS server.

SNTP Support SNTP to synchronize system clock in

internet

Firmware Update Support TFTP firmware upgrade, TFTP backup and

restore.

Configuration upload and download

Support binary format configuration file for system

quick installation

PART Number	DESCRIPTION
CWGE9MS	Commercial Grade Managed Ethernet Switch with (7) 10/100/1000TX + (2) Gigabit Combo SFP Ports
OPTIONAL	Side-by-Side Rack Mount Bracket Adaptor Kit – with mounting hardware (Optional, order model RMB-3) Rack Mount Bracket Adaptor Kit – with mounting hardware (Optional, order model RMB-2)

