comnet
Communication Networks

Modular 24 Port Gigabit Managed Ethernet Switch

ValueLine CWGE24MODMS

INCLUDED FLEXIBILITY 24

The ComNet™ CWGE24MODMS managed Ethernet switch chassis provides transmission of (24) Ethernet Ports with the use of three eight port expansion modules. This Ethernet switch is easily configurable by selecting, sold separately, eight port modules that allow for all copper, optical with four copper and four SFP modules, or all optical with SFP* modules making the CWGE24MODMS switch available for use with either conventional CAT-5e copper or optical transmission media. When configured with eight-port modules that contain electrical ports, those port support 10/100/1000 Mbps Ethernet IEEE 802.3 protocol, and auto-negotiation and auto-MIDI/MIDX features are provided for simplicity and ease of installation. When configured with the CWGE24MOD/8FXSFP eight-port module that contains SFP optical ports, those ports operate at 1000 Mbps. The CWGE24MODMS and its corresponding modules are designed for installation in benign (0° to +45° C) operating environments.

FEATURES

› 10/100/1000 BASE-TX and 1000 BASE-FX compatible

› Flexible Ethernet interface configuration via plug-in modules

› Fully configurable through web-based or SNMP network management

› IGMP Snooping V1/V2 for multicast filtering and IGMP Query V1/V2

› These layer 2 managed switches are optically (1000 BASE-FX) and electrically compatible with any IEEE 802.3 compliant Ethernet devices.

› Port based VLAN (IEEE 802.1Q)

› Rapid Spanning Tree protocol (IEEE 802.1w)

› Internal Power Supply 100-240VAC Input

› LED status indicators confirm operating status of the managed switch and network

› Plug-and-play design ensures ease of installation, and no electrical or optical adjustments are ever required.

› Low-profile 1-RU (1.75 in) high rack-mountable chassis mounts within any standard 19-inch equipment rack

› Operating Temperature Range of 0˚ C to 45˚ C

› Five Year Warranty

** Small Form-Factor Pluggable Module. Sold separately.*

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BENEFITS

System Interface/Performance	- Store-and-Forward Switching Architecture - Back-plane (Switching Fabric): 48Gbps - 6Mbits Packet Buffer - 16K MAC Address Table - 10K Jumbo Frame
3-Slot Gbps Module Hot-Swappable	- 8 x 10/100/1000T RJ45 8 x 1000FX Fiber SC - 8 x 1000FX SFP - 4 x 10/100/1000T RJ45 + 4 x 1000FX SFP
Spanning Tree	- Support IEEE802.1w Rapid Spanning Tree
VLAN	- Port Based VLAN - Support 802.1 Q Tag VLAN - GVRP
SNMP	- SNMP v1/v2c - SNMP Trap
Bandwidth Control	- Ingress Packet Filter and Egress Rate Limit
Port Trunk with LACP	
Security	- Port Security: MAC address entries/filter - IP Security: IP address security management to prevent unauthorized intruder - Login Security: IEEE802.1X/RADIUS
QoS (Quality of Service)	- 8 Priority Queues - Strict and WRR priority rule - Port Base, Tag Base, IPv4 Type of Service and IPv4 Different service
IGMP	- IGMP v1/v2 - 256 multicast groups and IGMP query
Port Mirror	Monitor traffic in switched networks - TX packet only - RX packet only - Both TX and RX packet
System Event Log	- System Log (Local/Remote Server) - SMTP e-mail Alert
LLDP	- IEEE 802.1ab Link Layer Discovery Protocol
Access Control List	
Standard Compliance	- IEEE802.3 10Base-T Ethernet - IEEE802.3u 100Base-TX/100Base-FX - IEEE802.3z Gigabit fiber - IEEE802.3ab 1000Base-T - IEEE802.3x Flow Control and Back Pressure - IEEE802.3ad Port trunk with LACP - IEEE802.1w Rapid Spanning Tree - IEEE802.1p Class of Service - IEEE802.1q VLAN Tagging - IEEE802.1x User Authentication - IEEE802.1ab LLDP

SOFTWARE FEATURES

Management	SNMP v1/v2c, Telnet, RMON1, CLI and Web Management
SNMP MIB	RFC 2863 Interface Group MIB, RFC 1213 MIBII, RFC 1493 Bridge MIB, RFC 2674 VLAN MIB, RFC 1643 Ethernet Like MIB, RFC 1215 Trap MIB, RFC 1757 RMON MIB, Private MIB
SNMP Trap	Cold start/Warm start trap, Link down/Link up trap, Authentication fail trap
Flow Control	IEEE802.3x Flow control: Flow control for 10/100/1000 full duplex, Back pressure for 10/100 half duplex
VLAN	Port based VLAN, up to 24 groups IEEE802.1Q Tag VLAN Static VLAN groups up to 256, Dynamic VLAN group up to 2048, VLAN ID from 1 to 4094. GVRP (future release).
Port Trunk with LACP	IEEE802.3ad with LACP function. Up to 7 trunk groups with failover feature and the member up to 8 ports.
Spanning Tree	Support IEEE802.1w Rapid Spanning Tree
Quality of Service	The quality of service determined by port, Tag and IPv4 Type of Service, IPv4 Different Service
Class of Service	Per port 8 priority queues and support strict and WRR priority rule. Weight round ratio (WRR): 1:2:3:4:5:6:7:8 Weight round ratio (WRR): 1:1:2:2:3:3:4:4 Weight round ratio (WRR): 1:1:2:2:4:4:8:8
IGMP	Support IGMP snooping v1, v2; 256 multicast groups and IGMP query
Port Security	Support 128 entries of MAC address for static MAC and another 128 for MAC filter
Port Mirror	Support 3 mirroring types: RX, TX and Both packet
Bandwidth Control	Per port support ingress rate limiting and egress rate shaping control.
IP Security	IP address security to prevent unauthorized intruder.
Login Security	Support IEEE802.1X User Authentication and can report to RADIUS server: Reject, Accept, Authorize, Disable
Access Control List (ACL)	The system provides control list on Source IP & Destination IP
DHCP	DHCP Client/ DHCP Server/
DNS	Provide DNS client feature and support primary and Secondary DNS server
SNTP	Support RFC 2030 SNTP client
SMTP	System supports 5 mail accounts as receivers and 2 Mail servers for Primary and Secondary. The SMTP will auto send event message to supervisor whom is pre-defined in the SMTP system through the pre-defined mail server.
LLDP	Support IEEE 802.1ab Link Layer Discovery Protocol

SPECIFICATIONS

Switch Architecture Back-plane (Switching Fabric): 48Gbps

Connectors[1]

RS232 Console	1 × DB-9 Female
CWGE24MOD/8TX:	8 × RJ45
CWGE24MOD/8FXSFP:	8 × SFP port
CWGE24MOD/8FXSC(M)(S)1:	8 x SC for Gigabit SX or LX
CWGE24MOD/8TX4SFP4:	4 × RJ45 + 4 × SFP

Packet Buffer 6Mbits

Mac Address 16K MAC address table

Jumbo Frame 10 KB

Indicating LEDs

System Power
Gigabit Copper Module: Link/Activity, Speed
Gigabit Fiber Module: Link/Activity
SFP Module: Link/Activity
Gigabit Copper + SFP Module:
RJ45: Link/Activity, Speed (10/100/1000 Mbps); SFP: Link/Activity, Speed

Power

Power Supply	AC 100 V~240 V 50/60 Hz Optional Redundant Power: DC (12 V~48 V)
Power Consumption	35 W

Electrical & Mechanical

Case Dimensions	17.32 × 11.0 × 1.73 in (44 × 28 × 4.4 cm)
Installation	19" Rack Mount

Environmental

Operating Temperature	0˚ C to 45˚ C
Storage Temperature	-40˚ C to 70˚ C
Ventilation	2 Fans
Operating Humidity	5% to 95% (Non-condensing)
Storage Humidity	5% to 95% (Non-condensing)
EMI	FCC Class A, CE

[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

AGENCY COMPLIANCE
PART 15 COMPLIANT
N24621

ORDERING INFORMATION

Part Number	Description
CWGE24MODMS/Chassis	3 Slot Gigabit Managed Switch – **Chassis Only**
CWGE24MOD/8TX	8 × 10/100/1000T – **Module Only**
CWGE24MOD/8FXSCM1[2]	8 × 1000FX (SC, MM 550m) – **Module Only**
CWGE24MOD/8FXSCS1[2]	8 × 1000FX (SC, SM 10km) – **Module Only**
CWGE24MOD/8FXSFP[2]	8 × SFP – **Module Only** (requires purchase of SFP modules, see SFP Data Sheet for availability)
CWGE24MOD/8TX4SFP4[2]	4 × 10/100/1000T + 4 SFP – **Module Only** (requires purchase of SFP modules, see SFP Data Sheet for availability)
Included Accessories	100-240VAC, 50/60Hz Power Supply (Included)
Options	Redundant Power: DC (12V~48V) (Optional)

[2] This product requires a fiber installation with a minimum 30 dB connector return loss. The use of Super Polish Connectors is recommended. Complies with FDA Performance Standard for Laser Products, Title 21, Code of Federal Regulations, Subchapter J.

Note: In a continuing effort to improve and advance technology, product specifications are subject to change without notice.

Low Power Consumption

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