

## 8+24+4 Port Industrial Managed Gigabit Ethernet Switch



### PRODUCT OVERVIEW



- 8x Gigabit Ethernet ports
- 24x 100/1000FX SFP ports
- 4x 1/10 Gigabit Ethernet SFP+ ports
- Built for harsh environments and wide temperature range applications
- RSTP, MSTP, ERPS, MRP, LACP for Network Redundancy
- QoS CoS/DSCP to increase determinism
- Supports IGMP Snooping v1/v2/v3, up to 4096 groups
- DHCP Relay Option 82 for policies IP address assignment
- SNMP v1/v2c/v3 for network management
- Supports Storm Protection
- USB storage for configuration-free replacement
- Supports industrial automation protocols Ethernet/IP and Modbus TCP

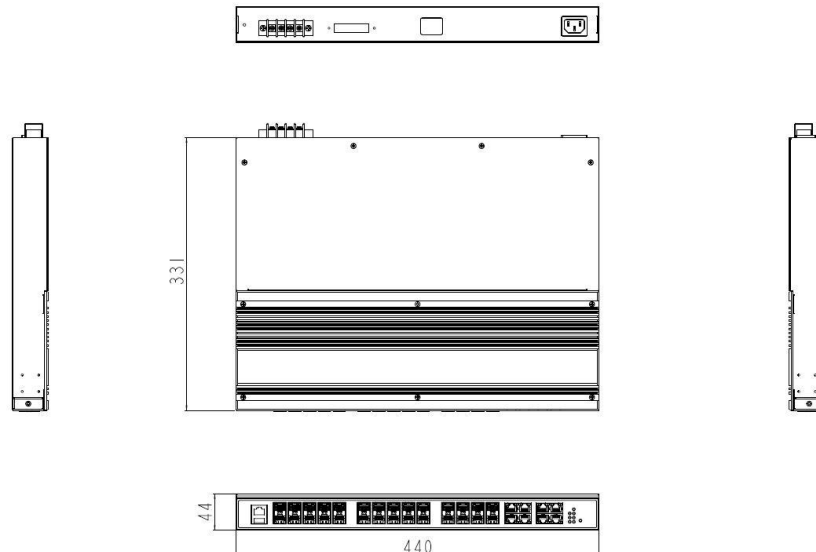
### ORDERING INFORMATION

PART CODE	DESCRIPTION
GEMS2-8T+24G+4X	Gigabit Ethernet Managed Switch Layer 2 with 16TX, 8 combo and 4FX ports

#### RECOMMENDED ACCESSORIES

SFP-FS2L-1313-20	SFP – 100M, SM, 2 fiber, LC, 1310 nm, 20km
SFP-GS2L-1313-20	SFP – 1000M, SM, 2 fiber, LC, 1310 nm, 20km
SFP-XS2L-1313-10	SFP – 10G, SM, 2 fiber, LC, 1310 nm, 10km

### OUTLINE (MM)



## SPECIFICATIONS

## TECHNOLOGY

<b>Standards</b>	IEEE 802.3 10BaseT
	IEEE 802.3u 100BaseTX
	IEEE 802.3ab 1000BaseT
	IEEE 802.3z 1000BaseX
	IEEE 802.3ae 10GBase over Fiber
	IEEE 802.3x Flow Control
	IEEE 802.3az Energy-Efficient Ethernet
	IEEE 802.3ad/802.1AX LACP
	IEEE 802.1D Spanning Tree Protocol
	IEEE 802.1w Rapid STP
	IEEE 802.1s Multiple STP
	ITU-T G.8032 / Y.1344 ERPS
	IEEE 802.1Q VLAN Tagging
	IEEE 802.1ad Stacked VLANs
	IEEE 802.1p Class of Service
IEEE 802.1X Network Authentication	
IEEE 802.1AB LLDP	
IEEE 1588 PTP	

**Processing Type** Store and Forward

## SWITCH PROPERTIES

<b>Switch Fabric</b>	144 Gbps
<b>Priority Queues</b>	8 Queues
<b>Jumbo Frame</b>	12288 bytes
<b>MAC Table Size</b>	32K
<b>Packet Buffer</b>	32 Mbits
<b>VLAN Table Size</b>	4094
<b>IGMP Group</b>	4096
<b>ACL Group</b>	4096

## SOFTWARE FEATURES

<b>Network Redundancy</b>	RSTP, MSTP, G.8032 ERPSv2, Port Trunking with LACP
<b>Security</b>	802.1X, RADIUS, TACACS+, SSL, SSH, ACL
<b>Management</b>	IPv4, IPv6, Web, Telnet, Serial Console, CLI, SFTP, SNMP v1/v2c/v3, uPnP
<b>Diagnostics</b>	RMON, SNMP Inform/Trap, Syslog, SMTP, Port Mirroring, LLDP, Cable Diagnostics, RSPAN
<b>Configuration</b>	DHCP Server/Client, Relay Option 82, TFTP, USB
<b>Filter</b>	802.1Q VLAN, Q-in-Q, IGMP Snooping v1/v2/v3, IGMP Querier, Independent Vlan Learning
<b>Time Sync.</b>	NTP, IEEE1588v2 OC (Software Timestamp), TC (Hardware Timestamp)
<b>QoS</b>	CoS, DSCP, WRR/SPQ Queuing, Storm Protection, Bandwidth Control
<b>Industrial Profiles</b>	Ethernet/IP, Modbus TCP, Profinet

## INTERFACE

<b>RJ45 Port</b>	8x 10/100/1000T(x), auto negotiation speed duplex mode, auto MDI/MDI-X
<b>Fiber Port</b>	24x 100/1000F(x) SFP Slot 4x 1/10 Gigabit SFP+ Slot
<b>LED Indicators</b>	PWR1, PWR2, Fault, Ring Master, Ring State <b>Ports:</b> Link/Active (Green), Speed(Amber)
<b>Alarm Contact</b>	1x relay output with current carrying capacity of 1A @ 24 VDC
<b>Digital Inputs</b>	1x isolated input from the electronics. +13 to +30V for state "1" -30 to +3V for state "0" Max. input current: 8mA
<b>Button</b>	Multiple function reset button
<b>Serial Console</b>	1x RS232 in RJ45 connector with console cable, 115.2Kbps, 8N1
<b>Storage</b>	1x USB 2.0 storage for firmware update, configuration backup, restore, boot up and syslog

## SPECIFICATIONS (CONTINUED)

## POWER REQUIREMENTS

**Operation Voltage** 90-264VAC  
12-48VDC Optional (consult factory)

**Connection** AC socket

**Power Consumption** 0.46A @ 110VAC

**Protection** Overload Current Protected,  
Reverse Polarity Protected

## MECHANICAL CONSTRUCTION

**Enclosure** Aluminum/Steel

**Protection Class** IP30

**Dimensions (WxHxD)** 17.32 x 1.73 x 13.04 inches  
440 x 44 x 331 mm

**Weight** 4.80 kg

**Mounting** Rack Mounting

## ENVIRONMENTAL LIMITS

**Operating Temperature** -40°C ~ 75°C (-40°F ~ 167°F)  
-40°C ~ 60°C (-40°F ~ 140°F)  
(10G)

**Storage Temperature** -40°C ~ 85°C (-40°F ~ 185°F)

**Ambient Relative Humidity** 5 to 95%, (Non-Condensing)

## REGULATORY APPROVALS

**EMI** FCC Part 15 Subpart B Class A  
CE EN 55032 Class A

**EMS** IEC61000-4-2 (ESD)  
IEC61000-4-3 (RS)  
IEC61000-4-4 (EFT)  
IEC61000-4-5 (Surge)  
IEC61000-4-6 (CS)  
IEC61000-4-8 (Magnetic Field)

**Free Fall** IEC60068-2-32

**Shock** IEC60068-2-27

**Vibration** IEC60068-2-6

**Green** RoHS Compliant

**MTBF** >100,000 hours

**Warranty** 5 Years

## Notes:

- In a continuing effort of improvement and updating technology, product specifications are subject to change without notice

## CONTACT US

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