HARDENED 8-PORT MANAGED LAYER 2 GIGABIT ETHERNET SWITCH WITH 4x10/100/1000Base-T(X) RJ45 PORTS + 4x1000Base-X SFP PORTS





## **FEATURES**

- IEEE 802.3af/at PoE compliant 4x10/100/1000Base-T(X) and 4x100/1000Base-X SFP ports
- M-Ring, (Recovery time≤15ms) for network redundancy
- Advanced routing: Static route, RIP, OSPF, VRRP, IEEE1588
- Ethernet Ring Protection STP/RSTP/MSTP/ITU-TG.8032
- IGMP v1/v2/v3 and MLD v1/v2 Snooping for filtering multicast traffic
- IEEE802.1Q VLAN/MAC based VLAN/Protocol based VLAN/IP subnet based VLAN/GVRP/MVR is supported
- DHCP Server/Client/Relay/Snooping for IP security management
- Port-based IEEE802.1X / Single and multiple IEEE802.1X / MAC- based authentication / VLAN Assignment / IP source guard / RADIUS / TACACS+ / ACL / SSHv2 / HTTPS
- DNS client/proxy is supported
- LACP/Link Aggregation Static for increases throughput
- Supports Port mirroring, port speed limits, broadcast, Storm control
- WEB interface Management, CLI-Console/Telnet can be utilized
- SNMPv1/v2/v3 RMON/System Syslog for traffic monitoring
- Green Industrial series, low power consumption
- Wide working temperature (-40°C~+75°C)
- IP40 protection, metal housing

## **DESCRIPTION**

The Meridian MS8GT4GX4 is a managed Gigabit Ethernet switch with 4x10/100/1000Base-TX and 4x1000Base-X Ports with complete support of Ethernet redundancy protocol. M-Ring (recovery time≤15ms).

The MS8GT4GX4POEH is the P.S.E. version of the switch and supports Power over Ethernet, ability to transmit electrical power with data to remote devices over standard twisted-pair cable.

This switch has four 1000Base-T(X) 30Watts P.S.E. (Power Sourcing Equipment) ports and four 1000Base-X ports, which are fully compliant with IEEE 802.3at, IEEE802.3 af standard.

This switch can be managed using web browser interface or optional Windows utility - SpectraVISION.

The switch is designed to work in wide operating temperature from -40 °C to 75 °C, to make it completely suitable for harsh environments.

## **MARKETS**

- \* Highway monitoring/communication systems
- \* City intelligent transportation systems
- \* Rail transportation monitoring/communication systems
- \* Large-scale industrial communication systems
- \* Railway electric industry control systems
- \* Thermal power industrial control systems
- \* State grid industrial communication systems



## **SPECIFICATIONS**

Physical Ports				
10/100/1000Base-T(X)Ports in RJ45 Auto MDI/MDIX	4			
100/1000Base-X SFP port	4			
Technology				
Ethernet Standards	IEEE802.3i/802.3u/802.3ab/802.3z/802.3x/802.3ad /802.1p/ 802.1q/802.1d/802.1w/802.1s/802.1ad/802.3az/8 02.1x/ 802.1ab, IEEE802.3af-2003, IEEE802.3at-2009			
Protocol	M-Ring, IGMP v1/v2/v3 Snooping, GVRP, SNMPv1/2/3, MLD v1/v2 Snooping, DHCP Server/Client/Relay/snooping, RMON, HTTPS, Telnet, System syslog, SSHv2, DNS client/proxy, CLI-Console, Q-in-Q, RADIUS, TACACS+, ACL			
MIB	MIB-II, Ethernet-Like MIB, Q-BRIDGE MIB, Bridge MIB, RSTP MIB, RMON MIB Group 1, 2, 3, 9			
DDM Function	Tx/Rx Optical Power and Temperature control			
Flow Control	IEE802.3x flow control, back pressure flow control			
Switch Properties				
Priority Queues	8			
Maximum No. of Available VLANs	4094			
VLAN ID Range	1-4094			
MAC Table Size	8K			
Packet Buffer Size	4Mbit			
Packet Forwarding Rate	11.9Mpps			
Switching delay	<5µS			
Interfaces				
SFP Port	100/1000Base-X, SFP interface			
RJ45 Port	10/100/1000Base-T(X) auto negotiation			
802.3af/at PoE Port	Up to 30W on each PoE port, 720mA			
Console Port	Micro USB connector, RS232 TX/RX			
Alarm Contact	2-pin relay output with current carrying capacity of 0.5A@60V			

Transmission Distance	
Twisted pair	100m(Adopt standard CAT5, CAT5e)
Multi-mode	1310nm 5KM(100M), 850nm 550M(1000M)
Single mode	1310nm 40KM/60KM(100M) 1550nm 60KM/80KM(100M) 1310nm 10KM/40KM(1000M) 1550nm 60KM/80KM(1000M)

	60KM/80KM(1000M)	
LED indicators		
Power	Green LED: On - Power is On, Off - Power is Off.	
System Indicator	Green LED: On - The system is On, Off - The system is Off.	
POE Indicator	Green LED: On - POE is active, Off - POE is not active.	
10/100/1000Base-T(X) RJ45 Port Indicator	Yellow LED: On - The port speed is 1000Mbps. Off - The port speed is 10Mbps or 100Mpbs. Green LED: On and Blinking - Port LINK UP, data is transmitted. On - No Blinking - Port LINK UP Off - Port LINK DOWN	
1000Base-X SFP Port	Green LED: On-Port LINK UP On and Blinking-Data is transmitted. Off-Port LINK DOWN	
Power		
Input Voltage	48VDC redundant inputs	
Full Load	15W max	
Overload Current Protection	Yes	
Reverse Polarity Protection	Yes	
Connection	7-Pin terminal block	
Physical Characteristic		
Enclosure	IP40 rated metal enclosure, fanless	
Dimension (W x D x H)	55(W)x128(D)x155(H) mm (2.16 x 5.03 x 6.10 inch)	
Weight (g)	1500 g ( 3.3 lb)	
Mounting	DIN-Rail / Panel	
Environmental		
Storage Temperature	-40 to 85°C (-40 to 185°F)	
Storage Temperature Operating Temperature	-40 to 85°C (-40 to 185°F) -40 to 75°C (-40 to 167°F)	
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Ordering Information		Packing List	Packing List	
Description	MS8GT4GX4 - Hardened 8-port managed Gigabit Ethernet switch with 4x10/100/1000Base-T(X) RJ45 ports + 4x1000Base-X SFP ports	MS8GT4GX4 or MS8GT4GX4P0EH	1	
	MS8GT4GX4POEH - Hardened 8-port managed Gigabit Ethernet switch with 4x10/100/1000Base-T(X) PoE+ ports + 4x1000Base-X SFP ports	Wall-Mount Kit	1	
SFP Options	refer to Optical SFP Data Sheet for complete part numbers and ordering information	Manual CD	1	
SpectraVISION Software	Consult factory for pricing and availability	Din-Rail Kit (attached)	1	

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