

MANAGED ETHERNET SWITCH

HARDENED 10-PORT MANAGED LAYER 2 GIGABIT ETHERNET SWITCH WITH 16x10/100/1000Base-T(X) RJ45 PORTS + 2x1000Base-X SFP PORTS











FEATURES

- 16 IEEE 802.3af/at PoE compliance 10/100/1000Base-T(X) ports, 2 100/1000Base-X SFP ports
- M-Ring (recovery time<15ms), RSTP/STP, and MSTP for network redundancy
- Supports IPv4/IPv6
- Supports web interface management, CLI-Console/Telnet,SNMPv1/v2/ v3, RMON/System syslog
- Supports IEEE802.1Q VLAN/MAC based VLAN/Protocol based VLAN/ IP subnet based VLAN/QinQ/GVRP/MVR
- Supports Port-based IEEE802.1X/Single and multiple IEEE802.1X/ MACbased authentication/VLAN Assignment/ IP source guard/RADIUS/ TACACS+/ACL/SSHv2/HTTPS
- Supports ITU-T G.8032 Ethernet Ring Protection
- Supports IGMP v1/v2/v3 Snooping, MLD v1/v2 Snooping
- Supports DHCP Server/Client/Relay/snooping
- Supports DNS client/proxy
- Supports LACP/Link Aggregation Static
- Supports port mirroring, port speed limit, broadcast storm control
- Supports two 2.5G fiber port(optional 1G)
- EMC industrial level 4
- IP40 protection, metal housing

DESCRIPTION

The Meridian MS18GT16GX2 is a managed redundant ring Ethernet switch with 16x10/100/1000Base-TX and 2x1000Base-X Ports with complete support of Ethernet redundancy protocol. M-Ring (recovery time≤15ms).

The MS18GT16GX2POEH 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 sixteen 1000Base-T(X) 30Watts P.S.E. (Power Sourcing Equipment) ports and two 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



MS18GT16GX2 MS18GT16GX2POEH



SPECIFICATIONS

Physical Ports			
10/100/1000Base-T(X)Ports in RJ45 Auto MDI/MDIX	16		
100/1000Base-X SFP port	2		
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/802.1x/802.1ab		
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	26.7Mpps		
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)		

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.		
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 – Link/Act is active: On and Blinking-Port LINK UP, data is transmitted. On-Port LINK UP Off-Port LINK DOWN		
Power			
Power backup	Optional redundant power inputs		
Input Voltage	48VDC		
Full Load	15W		
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)	88(W)x123(D)x169(H) mm (3.47 x 4.85 x 6.66 inch)		
Weight (g)	1000 g (2.2 lb)		
Mounting	DIN-Rail / Panel		
Environmental			
Storage Temperature	-40 to 85°C (-40 to 185°F)		
Operating Temperature	-40 to 75°C (-40 to 167°F)		
Operating Humidity	5% to 95% Non-condensing		
Regulatory approvals			
EMI	FCC Part15 Subpart B Class A/EN55022 Class A		
EMS	EMS: EN61000-4-2 (ESD) Level 3, EN61000-4-3 (RS) exceeds Level 3, EN61000-4-4 (EFT) Level 3, IEC 61000-4-5 (Surge) Level 3, IEC 61000-4-6 (CS) Level 2, IEC 61000-4-8 IEC 61000-4-11, IEC 61000-4-16		
Shock	IEC60068-2-27		
Free Fall	IEC60068-2-32		
Vibration	IEC60068-2-6		
Safety	EN60950-1		

Ordering Information		Packing List	
Description	MS18GT16GX2 - Hardened 10-port managed Gigabit Ethernet switch with	MS18GT16GX2	1
"	16x10/100/1000Base-T(X) RJ45 ports + 2x1000Base-X SFP ports refer to Optical SFP Data Sheet for complete part numbers and ordering information	Wall-Mount Kit	1
SFP Options refer		Manual CD	1
SpectraVISION Software	Consult factory for pricing and availability	Din-Rail Kit (attached)	1