HARDENED 10-PORT MANAGED LAYER 2 GIGABIT ETHERNET SWITCH WITH 8x10/100/1000BASE-T(X) RJ45 PORTS + 2x1000BASE-X SFP PORTS

FC   CE   ✓ROHS

REDUNDANT POWER

FULL GIGABIT

+75°C
-40°C

MANAGED ETHERNET SWITCH

FEATURES

- IEEE 802.3af/at PoE compliant 8x10/100/1000Base-T(X) and 2x100/1000Base-X SFP ports
- M-Ring (recovery time<15ms), RSTP/STP, and MSTP for network redundancy
- Support for IPv4 and IPv6
- Supports 1588 ptpv2, Sync-E
- Ethernet Ring Protection with 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/QinQ/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
- Two 2.5G fiber ports with backward 1G compatability
- WEB interface Management, CLI-Console/Telnet can be utilized
- SNMPv1/v2/v3 RMON/System Syslog for traffic monitoring
- EMC industrial level 4
- IP40 protection, metal housing

DESCRIPTION

The Meridian MS10GT8GX2 is a managed Gigabit Ethernet switch with 8x10/100/1000Base-TX and 2x1000Base-X Ports with complete support of Ethernet redundancy protocol. M-Ring (recovery time≤15ms).

The MS10GT8GX2POEH 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 eight 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 temperature range from -40ºC to 75ºC, 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	8
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, 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	14.88Mpps
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.
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 85ºC (-40 to 185ºF)
Operating Temperature	-40 to 75ºC (-40 to 167ºF)
Operating Humidity	5% to 95% Non-condensing

Ordering Information

Description	MS10GT8GX2 - Hardened 10-port managed Gigabit Ethernet switch with 8x10/100/1000Base-T(X) RJ45 ports + 2x1000Base-X SFP ports MS10GT8GX2POEH - Hardened 10-port managed Gigabit Ethernet switch with 8x10/100/1000Base-T(X) PoE+ ports + 2x1000Base-X SFP ports
SFP Options	refer to Optical SFP Data Sheet for complete part numbers and ordering information
SpectraVISION Software	Consult factory for pricing and availability

Packing List

MS10GT8GX2 or MS10GT8GX2POEH	1
Wall-Mount Kit	1
Manual CD	1
Din-Rail Kit (attached)	1