

MS10FT8GX2POEH



MANAGED ETHERNET SWITCH

HARDENED 10-PORT MANAGED POE ETHERNET SWITCH WITH 8x10/100Base-TX (RJ-45) (PoE + 30W) P.S.E. and 2x100/1000 BASE-X COMBO PORTS, SFP SOCKET

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FEATURES

- Supports 8 10/100 Base-TX and 2 100/1000 Base-X combo ports
- World's fastest Redundant Ethernet Ring: M-Ring (recovery time < 10ms over 250 units of connection)
- Open-Ring supports other vendor's ring technology in open architecture
- M-Chain allow multiple redundant network rings
- M-RSTP supports applications with complex topology
- STP/RSTP/MSTP supported
- 8 ports P.S.E. fully compliant with IEEE802.3af standard up to 30 Watts per port
- Provides PoE power on delay function. Users can define delay time for PoE power supply
- Supports PTP Client (Precision Time Protocol) clock synchronization
- Support Modbus/TCP protocol
- IGMP v2/v3 (IGMC snooping support) for filtering multicast traffic
- Port Trunking for easy bandwidth management
- SNMP v1/v2c/v3 support for secured network management
- RMON for traffic monitoring
- Supports LLDP (Link Layer Discovery Protocol)
- Supports DDM (Digital Diagnostic Monitoring) function
- Event notification through Syslog, Email, SNMP trap, and Relay Output
- Port lock to prevent access from unauthorized MAC address
- Optional Windows utility (SpectraVISION) supports centralized management and configurable by Web-based ,Telnet, Console (CLI)
- Rugged IP-30 housing design
- DIN-Rail or wall mounting

DESCRIPTION

Meridian's MS10FT8GX2POEH is a managed redundant ring Ethernet switch with 8x10/100Base-TX ports with 30Watts PoE (P.S.E.) function and 2x100/1000 Base-X combo ports.

With complete support of Ethernet redundancy protocol, M-Ring (recovery time < 10ms over 250 units of connection), Open-Ring, M-RSTP and MSTP/RSTP/STP (IEEE 802.1s/w/D) these switches will protect your mission-critical applications from network interruptions with its fast recovery technology.

M-Chain is the revolutionary network redundancy technology that provides the add-on network redundancy topology for any backbone network. M-Chain allows multiple redundant network rings of different redundancy protocols to join and function together as a larger and more robust compound network topology. M-Chain is providing ease-of-use, while maximizing fault-recovery timing, flexibility, compatibility, and cost effectiveness in one set of network redundancy topology.

The MS10FT8GX2POEH also supports Power over Ethernet, a system to transmit electrical power, along with data, to remote devices over standard twisted-pair cable in an Ethernet network. Each MS10FT8GX2POEH switch has 8X10/100Base-TX 30Watts P.S.E. (Power Sourcing Equipment) ports. P.S.E. is a device that will provide power in a PoE setup.

The MS10FT8GX2POEH supports the DDM (Digital Diagnostic Monitoring) function, which can monitor the status of electronic voltage, current and temperature in real time.

All functions of the MS10FT8GX2POEH switch can be managed by a powerful windows utility — SpectraVISION (optional). In addition, with its wide operating temperature range from -40 to 75°C, this switch will operate even in the most severe environments. This switch is one of the most sought-after choices for highly-managed Fiber Ethernet applications with PoE functionality.



MS10FT8GX2POEH DigiNET



SPECIFICATIONS

Physical Ports		
10/100 Base-TX Ports in RJ45 Auto MDI/MDIX with P.S.E.	8	
Gigabit Combo Ports with 10/100/1000Base-TX and 100/1000Base-X SFP port	2	
Technology		
Ethernet Standards	IEEE 802.3 for 10Base-T IEEE 802.3u for 100Base-TX and 100Base-FX IEEE 802.3z for 1000Base-X IEEE 802.3x for 1000Base-X IEEE 802.3x for 1000Base-T IEEE 802.3x for Flow control IEEE 802.1x for Flow control IEEE 802.1D for STP (Spanning Tree Protocol) IEEE 802.1p for COS (Class of Service) IEEE 802.1Q for VLAN Tagging IEEE 802.1w for RSTP (Rapid Spanning Tree Protocol) IEEE 802.1x for MSTP (Multiple Spanning Tree Protocol) IEEE 802.1x for Authentication IEEE 802.1AB for LLDP (Link Layer Discovery Protocol) IEEE 802.3at PoE specification (up to 30 Watts per port for PS.E.)	
MAC Table	8192 MAC addresses	
Priority Queues	4	
Processing	Store-and-Forward	
Switch Properties	Switching latency: 7 us Switching bandwidth: 5.6Gbps Max. Number of Available VLANs: 4096 IGMP multicast groups: 1024 Port rate limiting: User Define	
Security Features	Enable/disable ports, MAC based port security Port based network access control (802.1x) VLAN (802.1Q) to segregate and secure network traffic Supports Q-in-QVLAN for performance & security to expand the VLAN space Radius centralized password management SNMP v1/v2c/v3 encrypted authentication and access security	
Software Features	STP/RSTP/MSTP (IEEE 802.1D/w/s) Redundant Ring (O-Ring) with recovery time less than 10ms over 250 units TOS/Diffserv supported Quality of Service (802.1p) for real-time traffic VLAN (802.1Q) with VLAN tagging and GVRP supported IGMP Snooping for multicast filtering Port configuration, status, statistics, monitoring, security SNTP for synchronizing of clocks over network Support PTP Client (Precision Time Protocol) clock synchronization DHCP Server / Client support Port Trunk support MVR (Multicast VLAN Registration) support Modbus TCP	

Network Redundancy	M-Ring, Open-Ring, M-Chain, M-RSTP, STP, RSTP, MSTP	
Warning / Monitoring System	Relay output for fault event alarming Syslog server / client to record and view events Include SMTP for event warning notification via email Event selection support	
DDM Function	Voltage / Current / Temperature	
RS-232 Serial Console Port	RS-232 in RJ45 connector with console cable. 9600bps, 8, N, 1	
LED indicators		
Power/PoE Indicator	Green : Power LED x 3, Green : PoE LED x 8	
R.M. indicator	Green : Indicate system operated in M-RING Master mode	
Fault indicator	Amber: Indicate unexpected event occurred	
10/100Base-TX RJ45 Port Indicator	Green for port Link/Act. Amber for Duplex/Collision	
10/100/1000Base-TX RJ45 Port Indicator	Green for Link/Act. Amber for 100Mbps indicator	
100/1000Base-X Fiber Port Indicator	Green for port Link/Act.	
Fault contact		
Relay	Relay output to carry capacity of 1A at 24VDC	
Power		
Redundant Input Power	Dual DC inputs. 50 ~ 57VDC on 6-pin terminal block *	
Power Consumption (Typ.)	7.68 Watts (power consumption of P.S.E. is not included)	
Overload Current Protection	Yes	
Reverse polarity protection	No	
Physical Characteristic		
Enclosure	IP-30	
Dimension (W x D x H)	74.3 (W) x 109.2 (D) x 153.6 (H) mm (2.93 x 4.3 x 6.05 inch	
Weight (g)	1185 g (2.44 lb)	
Environmental		
Storage Temperature	-40 to 85°C (-40 to 185°F)	
Operating Temperature	-40 to 75°C (-40 to 168°F)	
Operating Humidity	5% to 95% Non-condensing	
Regulatory approvals		
EMI	FCC Part 15, CISPR (EN55022) class A	
EMS	EN61000-4-2 (ESD), EN61000-4-3 (RS), EN61000-4-4 (EFT) EN61000-4-5 (Surge), EN61000-4-6 (CS), EN61000-4-8, EN61000-4-11	
Shock	IEC60068-2-27	
Free Fall	IEC60068-2-32	
Vibration	IEC60068-2-6	
Safety	EN60950-1	

RJ-45 Port Pin Definition

PIN #1	TD+ with PoE Power input +
PIN #2	TD- with PoE Power input +
PIN #3	RD+ with PoE Power input -
PIN #6	RD+ with PoE Power input -

st In order to achieve full power capacity, power supply output voltage need to be adjusted in the 50-57VDC range

Ordering Information		Packing List	
Description	MS10FT8GX2POEH - Hardened 10-port managed PoE Ethernet switch with 8x10/100Base-TX (RJ-45) (PoE + 30W) P.S.E. and 2x100/1000 Base-X combo ports,	MS10FT8GX2POEH	1
	SFP socket	Wall-Mount Kit	1
SFP Options	refer to Optical SFP Data Sheet for complete part numbers and ordering information	Quick Installation Guide	1
	PSH48DC240 - 48VDC @ 5 Amp Amps (240 Watts)	M-Ring Tool CD	1
	PSH48DC480 - 48VDC @ 10 Amp Amps (480 Watts)	Console Cable	1
SpectraVISION	S500 - Powerful Network Management Windows Utility Suit, 500 IP devices	Din-Rail Kit (attached)	1