MS10FT8GX2POE | DigiNET

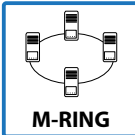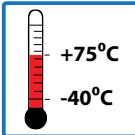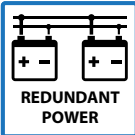**HARDENED 10-PORT MANAGED PoE ETHERNET SWITCH WITH 8x10/100BASE-TX P.S.E. AND 2x100/1000 BASE-X COMBO PORTS, SFP SOCKET**

P.S.E PoE

REDUNDANT POWER

G FULL GIGABIT

+75°C -40°C

M-RING

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-RSTP supports applications with complex topology
- STP/RSTP/MSTP supported
- 8 ports P.S.E. fully compliant with IEEE802.3af standard, provide up to 15.4 Watts per port
- Provide PoE power on delay function, users can define delay time for PoE power supply
- Support PTP Client (Precision Time Protocol) clock synchronization
- IGMP v2/v3 (IGMC snooping support) for filtering multicast traffic
- Port Trunking for easy of bandwidth management
- SNMP v1/v2c/v3 support for secured network management
- RMON for traffic monitoring
- Support 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)
- Rigid IP-30 housing design
- DIN-Rail or wall mounting

DESCRIPTION

Meridian's MS10FT8GX2POE is a managed redundant ring Ethernet switch with 8x10/100Base-TX ports with 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.

The MS10FT8GX2POE 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 MS10FT8GX2POE switch has 8X10/100Base-TX P.S.E. (Power Sourcing Equipment) ports. P.S.E. is a device that will provide power in a PoE setup.

MS10FT8GX2POE supports the DDM (Digital Diagnostic Monitoring) function, which can monitor the status of electronic voltage, current and temperature in real time.

All functions of MS10FT8GX2POE 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 function.

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 802.3ab for 1000Base-TX, IEEE 802.3x for Flow control IEEE 802.3ad for LACP (Link Aggregation Control Protocol) 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 802.1s for MSTP (Multiple Spanning Tree Protocol) IEEE 802.1x for Authentication IEEE 802.1AB for LLDP (Link Layer Discovery Protocol) IEEE 802.3af PoE specification (up to 15.4 Watts per port for P.S.E.)
MAC Table	8192 MAC addresses
Priority Queues	4
Processing	Store-and-Forward
Switch Properties	Switching latency: 5 us, typ. 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-Q VLAN 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 (M-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

Network Redundancy	M-Ring, Open-Ring, 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. 48VDC on 6-pin terminal block
Power Consumption (Typ.)	9 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)	1100 g (2.43 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 -**

Ordering Information

Description	**MS10FT8GX2POE - Hardened 10-port managed PoE Ethernet switch with 8 port 10/100TX (RJ45) (PoE 15.4W) + 2 port 10/(100/1000 SFP)/RJ45 combo ports**
SFP Options	**refer to Optical SFP Data Sheet for complete part numbers and ordering information**
Power supplies	**PSH48DC240 - 48VDC @ 5 Amp Amps (240 Watts)** **PSH48DC480 - 48VDC @ 10 Amp Amps (480 Watts)**
SpectraVISION	**S500 - Powerful Network Management Windows Utility Suit, 500 IP devices**

Packing List

MS10FT8GX2POE	**1**
Wall-Mount Kit	**1**
Quick Installation Guide	**1**
M-Ring Tool CD	**1**
Console Cable	**1**
Din-Rail Kit (attached)	**1**

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