



ProSwitch® PoE Managed Fast Ethernet PoE Classroom/Workgroup Switches

Models: **MS1008-2G-4POE**
PSX1008-2G-4POE

Key Highlights

- ▶ Managed 9 port switch with 8 10/100Base-TX ports (4 ports PoE) plus 1 10/100/1000Base-TX port and 1 mini GBIC for 1000Base-SX or LX fiber (9 usable ports)
- ▶ Management features include:
 - Access via web, Telnet and CLI
 - SNMP
 - RMON
 - IGMP snooping and query mode
 - 802.1x user authentication
 - QoS (port and tag based)
 - CoS (four queues)
 - Port security
 - VLANs
 - GVRP
 - Port mirroring
 - Flow control
 - MAC address security
 - Spanning tree protocol
 - 802.3ad Trunk with LACP
 - TFTP firmware update
 - IP Management Security
 - DHCP client/relay
 - SNTP and SMTP Support
 - X-ring function provides dual homing and couple ring
- ▶ PoE Management
- ▶ Reduces the cost of initial cable installation by eliminating the need for a cable for every workstation
- ▶ Backed by Waters' limited lifetime warranty

WATERS NETWORK SYSTEMS
www.watersnet.com

Corporate Headquarters
7401 Metro Blvd., Suite 560
Edina, MN 55439
Toll Free: 800.862.3894
Phone: 952.831.5604
Fax: 952.831.5605

Manufacturing
945 37th Avenue, NW,
Rochester, MN 55901
Toll Free: 800.328.2275
Phone: 507.285.1951
Fax: 507.285.1952

MS1008 and PSX1008-2G-4PoE Ethernet Switches 10/100/1000Mbps Switch



MS1008-2G-4PoE



PSX1008-2G-4PoE

Waters Network Systems' MS1008 and PSX1008-2G-4PoE (Power over Ethernet) switches provide the ultimate in flexibility for small to medium sized workgroups. These compact nine port switches deliver power, performance and reliability in a cost-effective, space saving design. The MS1008 model includes Waters' unique ruggedized housing which protects the electronics and limits tampering.

The 1008-2G-4PoE models are designed to be used outside the wiring closet in the end-user workspace. Ideally suited for small workgroups, classrooms or office applications, multiple users can be attached to a single drop of cable. The internal power supply assures years of reliable operation.

Eight 10/100Base-TX ports are available for workstations, printers or other Ethernet devices. Four PoE ports provide power to end devices such as wireless access points, VoIP phones, security cameras, etc. directly through conventional UTP cables. An additional ninth port is available for Gigabit connectivity in either fiber or copper. This design provides the ultimate in flexibility for both copper and fiber-based LANs.

Features and Benefits

- **Embedded PoE Injector function.** Managed PoE functions provide remote enable/disable, power feeding priority, output power limiting via attached PD classification and Detect Legacy Signature (resistive and capacitive) for pre-standard and non-conforming 802.3af devices.
- **802.3x Flow Control.** Compliant for full duplex and back pressure flow control for half duplex.
- **MDI/MDI-X function.** Both models provide auto-cross negotiation, eliminating the need for cross over cables.
- **802.1x support** for user authentications. The Radius server provides four conditions: reject, accept, authorize or disable.
- **QoS/CoS support.** Both models support four queues with weight round ratio High, Mid-High, Mid-Low and Low. QoS is port and tagged based with IPv4/IPv6 service.
- **Port mirroring helps monitor the network.** Port mirroring copies traffic from a specific port to a target port. Both models support three mirroring types: TX, RX and both packets. This function helps track network errors or abnormal packet transmission without interrupting the flow of data.
- **VLAN capable for performance and security.** VLANs are used to isolate traffic between users and thus provides better security. Limiting the broadcast traffic to the same VLAN broadcast domain also enhances performance. Both models support 802.1Q Tagged VLAN, Protocol VLAN and GVRP (up to 256 groups).



MS and PSX1008-2G-4PoE Ethernet Switches

ORDERING INFORMATION

Model	Description
Managed Ethernet switch with internal power supply	
PSX1008-2G-4PoE	9 port managed switch with 8 10/100Base-TX RJ45 ports (4 ports PoE) plus one mini GBIC slot for 1000Base-SX or LX fiber or one 10/100/1000Base-TX port
MS1008-2G-4PoE	9 port managed switch with 8 10/100Base-TX RJ45 ports (4 ports PoE) plus one mini GBIC slot for 1000Base-SX or LX fiber or one 10/100/1000Base-TX port. Includes classroom/workgroup security housing.
SFP Fiber Modules for MS1008 and PSX1008-2G-4PoE	
SFP-1000SXLC	1 port 1000Base-SX MM fiber module with LC connector
SFP-1000LXLC-10	1 port 1000Base-LX SM (10km) fiber module with LC connector
SFP-1000LXLC-30	1 port 1000Base-LX SM (30km) fiber module with LC connector

SPECIFICATIONS

OPERATIONAL CHARACTERISTICS:

- MAC Address Table
 - ▶ 8k
- Switching Architecture
 - ▶ Store-and-forward
 - ▶ System backplane 5.6Gbps
 - ▶ System throughput up to 8.3Mbps
- Memory Buffer Size
 - ▶ 1Mb
- Performance
 - ▶ Non-blocking wire speed

MANAGEMENT FEATURES:

- ▶ Web-based, Telnet and CLI
- ▶ SNMP
- ▶ SNMP IP security (supports up to 10 IP accounts)
- ▶ SNMP trap support
- ▶ Port setting for duplex and speed
- ▶ Port trunking (up to 3 groups)
- ▶ Port based and tagged VLANs (up to 256)
- ▶ QoS (4 priority queues; port based, tag based and type of service priority)
- ▶ Class of Service (supports 4 queues per port)
- ▶ IGMP (Supports 256 IGMP groups and IGMP query)
- ▶ GVRP (256 groups)
- ▶ Port Security (supports ingress and egress MAC address filter and static source MAC address lock)
- ▶ Port mirroring (supports 3 mirroring types: RX, TX and both packet)
- ▶ Broadcast storm
- ▶ Spanning Tree
- ▶ SMTP - 5 mail accounts
- ▶ System Log (1000 records)
- ▶ DHCP client / relay
- ▶ X-Ring provides Dual Homing and Couple Ring
- ▶ 802.1x User authentication/Radius server: reject, accept, authorize or disable
- ▶ RMON
 - ▶ RFC 2233MIBII
 - ▶ RFC 1157 SNMP MIB

- ▶ RFC 1493 Bridge MIB
- ▶ RFC 2674 VLAN MIB
- ▶ RFC 2665 Etherlike MIB
- ▶ RFC 1215 Trap MIB
- ▶ RFC 2819 RMON MIB
- ▶ Private MIB
- ▶ RFC 2030 SNTF
- ▶ RFC 3821 SMTP
- ▶ RFC1757 RMON1 MIB

PoE SPECIFICATIONS:

- ▶ PoE Enable/Disable
- ▶ Power limit by classification (enable/disable PD power classification)
- ▶ Power limit by management (enable power feeding priority)
- ▶ Per port power feeding priority setting
- ▶ Power through Ports 5-8:
 - ▶ Positive (VCC+): RJ45 pin 4, 5
 - ▶ Negative (VCC-): RJ45 pin 7, 8
- ▶ Detect Legacy Signature (resistive and capacitive)
- ▶ Per port provides 15.4 watts
- ▶ LED indicators for PoE ready and activity

NETWORK STANDARDS:

- ▶ IEEE 802.3
- ▶ IEEE 802.3u
- ▶ IEEE 802.3z
- ▶ IEEE 802.3x
- ▶ IEEE 802.3ab
- ▶ IEEE 802.3ad
- ▶ IEEE 802.1d
- ▶ IEEE 802.1w
- ▶ IEEE 802.1p
- ▶ IEEE 802.1q
- ▶ IEEE 802.1x
- ▶ IEEE 802.af

EMI/SAFETY COMPLIANCE:

FCC Class A, CE, UL cUL CE/EN60950-1

NETWORK CABLE CONNECTORS

- RJ45 shielded female ports
 - ▶ 10/100/1000Mbps: CAT5 UTP or better
 - ▶ MM and SM with LC connectors

POWER SUPPLY:

- Input Voltage
 - ▶ 100 to 240 VAC, 50 to 60Hz
- Power Consumption
 - ▶ 73 watts maximum

OPERATING ENVIRONMENT:

- Ambient Temperature:
 - ▶ 32° to 113°F (0° to 45°C)
- Storage:
 - ▶ -40° to 158°F (-40° to 70°C)
- Ambient relative humidity:
 - ▶ 5% to 95% (non-condensing)

MECHANICAL:

- Enclosure:
 - ▶ Rugged high-strength sheet metal suitable for stand-alone, wall or tabletop mounting
 - ▶ Cooling: Internal fan

PHYSICAL CHARACTERISTICS:

- Dimensions PSX1008 Model:
 - ▶ 8.5 x 5.5 x 1.75 in (217 x 140 x 43mm)
- Weight:
 - ▶ 2 lbs (.91kg)
- Dimensions MS1008 Model:
 - ▶ 11 x 10.5 x 2 in (279 x 267 x 51mm)
- Weight:
 - ▶ 3.7 lbs (1.68kg)

WARRANTY:

Limited Lifetime