



ProSwitch® Secure Classroom/Workgroup Switches

Models: **MS1008 (Managed)**
ES1008 (Unmanaged)

Key Highlights

- ▶ Managed 8-port switch with 8 10/100 Base-TX ports and optional 9th port:
 - 1000Base-TX, SX or LX
 - 1000Base-SX and 100BaseFX dual media port
 - 100Base-FX (MM or SM)
- ▶ Unmanaged 8-port switch with 8 10/100 Base-TX ports and optional 9th port:
 - 1000Base-TX, SX or LX
 - 100Base-FX (MM or SM)
- ▶ Security housing:
 - Designed for easy upgrade and removal of internal switch
 - Protects electronics and limits tampering
 - Cable management for secure connectivity
 - Compact 10" x 11" x 2" size
 - Easily mounts to wall or table
- ▶ MS1008 management features include:
 - Access via web, Telnet or CLI
 - IGMP
 - DHCP
 - QoS
 - VLANs
 - GVRP
 - Port mirroring
 - Spanning Tree
 - 802.3ad Trunk with LACP
 - RMON
 - SNMP
 - Port Security
- ▶ ES models supports port-based VLAN
- ▶ ST or SC fiber connectors available
- ▶ Backed by Waters' limited lifetime warranty

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MS1008 and ES1008 Ethernet Switches 10/100/1000Mbps Switches with Security Housing



MS1008-1FX1SX
(without security housing)



MS1008-GTX

Waters Network Systems' MS and ES1008 switches provide the ultimate in flexibility for small to medium sized workgroups. The 1008 models are compact eight and nine port switches that deliver power, performance and reliability in a cost-effective, space saving design. The enclosed ruggedized housing protects the electronics and limits tampering.

The MS and ES1008 switches are designed to be used outside the wiring closet in the end-user workspace. Ideally suited for small workgroups, classrooms, home or office applications, the MS and ES1008 models allow multiple users to attach to a single drop of cable. The internal power supply assures years of reliable operation.

Twelve models are available to support the connectivity demands of any fiber or copper based LAN. All models provide eight 10/100Base-TX copper ports with options for a ninth port. The ninth port can be your choice of either 1000Base-TX, SX or LX, 100Base-FX or the dual media configuration supporting both 1000Base-SX (GBIC) and 100Base-FX. The dual media configuration provides an ideal solution for future migration from an existing Fast Ethernet fiber-based LAN to Gigabit speeds.

Features and Benefits

- **802.3x Flow Control.** Compliant for full duplex and back pressure flow control for half duplex.
- **MDI/MDI-X function.** All models provide auto-cross negotiation, eliminating the need for cross over cables.
- **QoS supports layer 4 classification.** In addition to 802.1p Priority Queue support, the MS1008 models also supports programmable higher layer classification and prioritization to enable enhanced QoS for real time applications based on information passed from Layer 2 to Layer 4 such as VoIP.
- **Port mirroring on the MS1008s helps monitor the network.** Port mirroring copies traffic from a specific port to a target port. 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 different users and thus provides better security. Limiting the broadcast traffic to within the same VLAN broadcast domain also enhances performance. The MS1008 models support 802.1Q Tagged VLAN, Protocol VLAN, GVRP supported VLAN ID and up to 256 groups. The ES1008 models support port-based VLANs.



ES and MS1008 Ethernet Switches

ORDERING INFORMATION

Model	Description
MS1008 Series	Managed Ethernet switch with internal power supply and classroom/workgroup security housing
MS1008-TX	8-port managed switch with 8 10/100Base-TX RJ45 ports.
MS1008-MSC	9-port managed switch with 8 10/100Base-TX RJ45 ports plus 1-port 100Base-FX MM fiber with SC connector
MS1008-MST	9-port managed switch with 8 10/100Base-TX RJ45 ports plus 1-port 100Base-FX MM fiber with ST connector
MS1008-SSC-30	9-port managed switch with 8 10/100Base-TX RJ45 ports plus 1-port 100Base-FX SM (30km) fiber with SC connector
MS1008-GTX	9-port managed switch with 8 10/100Base-TX RJ45 ports plus 1-port 10/100/1000Base-TX RJ45
MS1008-GSXSC	9-port managed switch with 8 10/100Base-TX RJ45 ports plus 1-port 1000Base-SX MM fiber with SC connector
MS1008-GLXSC-10	9-port managed switch with 8 10/100Base-TX RJ45 ports plus 1-port 1000Base-LX SM (10km) fiber with SC connector
MS1008-1FX1SX	9-port managed switch with 8 10/100Base-TX RJ45 ports plus 1-port 100Base-FX MM fiber with SC connector and 1 mini GBIC slot for 1000Base-SX or LX fiber
ES1008 Series	Unmanaged Ethernet switch with internal power supply and classroom/workgroup security housing
ES1008-TX	8-port unmanaged switch with 8 10/100Base-TX RJ45 ports.
ES1008-MSC	9-port unmanaged switch with 8 10/100Base-TX RJ45 ports plus 1-port 100Base-FX MM fiber with SC connector
ES1008-MST	9-port unmanaged switch with 8 10/100Base-TX RJ45 ports plus 1-port 100Base-FX MM fiber with ST connector
ES1008-SSC-30	9-port unmanaged switch with 8 10/100Base-TX RJ45 ports plus 1-port 100Base-FX SM (30km) fiber with SC connector

SPECIFICATIONS

OPERATIONAL CHARACTERISTICS:

- MAC Address Table
 - ▶ MS1008 models: 8k
 - ▶ ES1008 models: 2k
- Switching Mode
 - ▶ Store-and-forward
- Memory Buffer Size
 - ▶ MS1008 models: 2Mb
 - ▶ MS1008-1FX1SX: 1Mb
 - ▶ ES1008 models: 768Kb
- Performance
 - ▶ Non-blocking wire speed

MS1008 MANAGEMENT FEATURES:

- ▶ Web-based, Telnet and console
- ▶ SNMP
- ▶ Port setting for duplex and speed
- ▶ Port trunking (4 groups)
- ▶ Port based and tagged VLANs (up to 256)
- ▶ QoS
- ▶ IGMP
- ▶ DHCP
- ▶ GVRP
- ▶ Port mirroring
- ▶ Broadcast storm
- ▶ Spanning tree
- ▶ Port security
- ▶ Firmware upgrade

ES1008 SMART SWITCH FEATURES:

- ▶ DIP switch for VLAN setting
- ▶ Port-based VLAN
- ▶ Fiber uplink DIP switch for full and half duplex settings

NETWORK STANDARDS:

ES1008 and MS1008 Models:

- ▶ IEEE 802.3
- ▶ IEEE 802.3u
- ▶ IEEE 802.3x

MS1008 Models:

- ▶ IEEE 802.1q
- ▶ IEEE 802.1p
- ▶ IEEE 802.1d
- ▶ IEEE 802.3ad

MS1008 Gigabit Models:

- ▶ IEEE 802.3ab (100Base-T)
- ▶ IEEE 802.3z (Gigabit fiber)

EMI/SAFETY COMPLIANCE:

FCC Class A, CE, UL cUL

NETWORK CABLE CONNECTORS

- RJ45 shielded female ports
 - ▶ 10/100Mbps: CAT5 UTP or better
 - ▶ Multimode SC or connectors
 - ▶ Singlemode SC connectors (up to 30km)

POWER SUPPLY:

- Input Voltage
 - ▶ 110 to 240 VAC, 50 to 60Hz

Power Consumption:

ES1008 Models:

- ▶ 7.5 watts maximum

MS1008 Models:

- ▶ 17 watts maximum
- ▶ 19 watts maximum (MS1008, GTX, GSXSC and GLXSC)
- ▶ 10 watts maximum (MS1008-1FX1SX)

OPERATING ENVIRONMENT:

- Ambient Temperature:
 - ▶ 32° to 113°F (0° to 45°C)
- Storage:
 - ▶ -40° to 158°F (-40° to 70°C)
- Ambient relative humidity:
 - ▶ 10% to 90% (non-condensing)

MECHANICAL:

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

PHYSICAL CHARACTERISTICS:

- Dimensions:
 - ▶ 11 x 10.5 x 2 in (279 x 267x 51mm)
- Weight:
 - ▶ 3.7 lbs (1.68kg)

WARRANTY:

Limited Lifetime Made in U.S.A.