



ProSwitch® GSM Managed Gigabit Classroom/ Workgroup Switches

Models: **GSM1008-2SFP**
GSM2108-2SFP

Key Highlights

- ▶ 8-port switch with eight 10/100/1000 Base-TX ports and two mini GBIC slots for 1000Base-SX and LX fiber
- ▶ Use one or both GBIC slots for fiber connectivity from either the core to the edge or from switch to switch
- ▶ Enclosed rugged housing (GSM1008-2SFP) includes:
 - Integrated cable management for secure cable connectivity
 - Removal of internal switch for technology upgrades or replacement
- ▶ Reduces the cost of initial cable installation by eliminating the need for a cable for every workstation
- ▶ Management functions include:
 - Access via web, Telnet, or CLI
 - GVRP/GARP
 - IGMP snooping
 - STP/RSTP
 - LACP
 - SNMP
 - Enterprise MIB
 - RMON
 - QoS
 - Port mirroring
 - VLANs
 - Port trunking
- ▶ Backed by Waters' limited lifetime warranty.

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GSM Series Ethernet Switches 10/100/1000Mbps Switches



GSM1008-2SFP



GSM2108-2SFP

Waters Network Systems' GSM Series of switches provide the ultimate in flexibility for small to medium sized workgroups. The GSM model is a compact eight port switch that delivers power, performance and reliability in a cost-effective, space saving design. The enclosed ruggedized housing protects the electronics and limits tampering. The GSM is the perfect solution for classrooms, industrial and commercial installations.

Waters' GSM switch provides a cost savings migration path from 10Mbps to 1000Mbps switched Ethernet. The GSM Series is designed for zone cabling applications, which significantly reduce network installation costs by minimizing cabling and electronics requirements. With two GBIC slots for fiber connectivity, the GSM1008 models are ideally suited for portable classrooms where a single fiber cable is connected to the main building's MDF/IDF core switch. Use the second fiber slot to connect additional portable classrooms.

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, so no cross over cables are required.
- **Dual media for flexible fiber connectivity.** Optional modules are available for short, medium or long haul fiber GIG connectivity. Use of the fiber module disables the corresponding 10/100/1000Base-TX port. Use the additional mini GBIC slots for flexible Gigabit fiber deployment.
- **QoS supports layer 4 classification.** In addition to 802.1p Priority Queue support, the switch 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 helps monitor network.** Port mirroring on the GSM switch 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.
- **Q-in-Q VLAN for performance and security.** VLAN is 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 GSM switch supports advanced VLAN techniques such as 802.1Q.
- **802.1x Access control for improved network security.** The GSM models' 802.1x function enables user authentication for each network access attempt. Port security allows you to limit the number of MAC addresses per port for better control. Static MAC addresses can be defined for each port to ensure only registered workstations are allowed access. By enabling both of these features, you can establish an access mechanism based on user and workstation identities, as well as control the number of access stations.



GSM Ethernet Switches

ORDERING INFORMATION

Model	Description
Managed Ethernet switch with internal power supply and classroom/workgroup security housing	
GSM1008-2SFP	8 port managed switch with 8 10/100/1000Base-TX RJ45 ports plus 2 slots for 1000Base-SX or LX fiber
Managed Ethernet switch with internal power supply	
GSM2108-2SFP	8 port managed smart switch with 8 10/100/1000Base-TX RJ45 ports plus 2 slots for 1000Base-SX or LX fiber
SFP Fiber Modules for GSM Models	
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
 - ▶ All Models: 8K
- Switching Mode
 - ▶ Store-and-forward
- Memory Buffer Size
 - ▶ 144KB
 - ▶ Jumbo frame support
- Performance
 - ▶ Non-blocking wire speed
 - ▶ Auto negotiation
 - ▶ Auto-MDIX
 - ▶ Back pressure flow control for half duplex
 - ▶ Flow control for full duplex

MANAGEMENT FUNCTIONS:

- ▶ Web-based, SNMP (v1, v2c), CLI and Telnet
- ▶ Port setting for duplex and speed
- ▶ Port trunking (4 groups)
- ▶ Port based and tagged VLANs (up to 256)
- ▶ IGMP snooping
- ▶ 802.1x access control
- ▶ GVRP/GARP
- ▶ Port mirroring
- ▶ Broadcast storm suppression
- ▶ QoS
- ▶ LACP
- ▶ STP/RSTP
- ▶ Enterprise MIB
- ▶ RMON

NETWORK STANDARDS:

- ▶ IEEE 802.3
- ▶ IEEE 802.3u
- ▶ IEEE 802.3ab
- ▶ IEEE 802.3z
- ▶ IEEE 802.3x
- ▶ IEEE 802.1q
- ▶ IEEE 802.1p
- ▶ IEEE 802.1d/w
- ▶ IEEE 802.1x
- ▶ IEEE 802.3ad
- ▶ IEEE 802.1q
- ▶ IEEE 802.1p

EMI/SAFETY COMPLIANCE:

FCC Part 15 Class A & CE Mark Approval

NETWORK CABLE CONNECTORS:

- RJ45 shielded female ports
 - ▶ 10/100/1000Mbps: CAT5 UTP or better
 - ▶ Multimode or singlemode with LC connectors

POWER SUPPLY:

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

OPERATING ENVIRONMENT:

- Ambient Temperature:
 - ▶ 32° to 122°F (0° to 50°C)
- Ambient Humidity:
 - ▶ 5% to 90% (non condensing)

MECHANICAL:

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

PHYSICAL CHARACTERISTICS:

- Dimensions (GSM1008-2SFP):
 - ▶ 11 x 10.25 x 2.25 in (279 x 267 x 57 mm)
- Weight:
 - ▶ 5 lbs (2.3kg)

- Dimensions (GSM2108 without enclosure):
 - ▶ 5.2 x 8.54 x 1.73 in
 - ▶ 132 x 217 x 44 mm
- Weight:
 - ▶ 2.43lbs (1.1kg)

WARRANTY:

Limited Lifetime Made in U.S.A