

## ProSwitch®-GS Gigabit Switches

Managed:	GSM-2108
	GSM-2116
	GSM-2124
Web Smart:	GSW-1108
	GSW-1116
	GSW-1124
Unmanaged:	GS-1008
	GS-1016
	GS-1024

### Key Highlights

- ▶ 8, 16 or 24-port switches with 10/100/1000Base-TX ports
- ▶ 2 mini GBIC slots for 1000Base-SX and LX fiber on 16 and 24 port models
- ▶ Add fiber SFPs as you need them
- ▶ Choose between managed, web smart and unmanaged models
- ▶ Use the web to manage web smart models
- ▶ Managed models provide:
  - Access via web, Telnet or CLI
  - GVRP/GARP
  - IGMP snooping
  - STP
  - SNMP
  - Enterprise MIB
  - RMON
- ▶ Web smart and managed models provide:
  - QoS
  - Port mirroring
  - VLANs
  - Port trunking
- ▶ Rack mountable
- ▶ Backed by Waters' limited lifetime warranty

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## GS Series Ethernet Switches 10/100/1000Mbps Switches



GSM-2124 switch with 24  
10/100/1000Base-TX ports  
and 2 mini GBIC slots

**Waters Network Systems' GS Series** of Gigabit switches provide 8, 16 and 24 port models for your wiring closet or small workgroups. Waters' GS series provides a cost savings migration path from 10 to 1000Mbps switched Ethernet. Choose between unmanaged, web smart and managed models.

### Features and Benefits

- **802.3x Flow Control.** All models are 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 on the 16 and 24 port models. 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, both the GSM and GSW switch support programmable higher layer classification and prioritization used 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 copies traffic from a specific port to a target port. The GSM and GSW models use this function to help track network errors or abnormal packet transmission without interrupting the flow of data.
- **Q-in-Q VLAN for performance and security in the GSM and GSW models.** 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 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.

# GS FixPort Ethernet Switches

## ORDERING INFORMATION

Model	Description
<b>10/100/1000Mbps Managed Ethernet Switch</b>	
GSM-2108	8 port managed switch with 8 10/100/1000Base-TX RJ45 ports plus 2 slots for 1000Base-SX or LX fiber
GSM-2116	16 port managed switch with 16 10/100/1000Base-TX RJ45 ports plus 2 slots for 1000Base-SX or LX fiber
GSM-2124	24 port managed switch with 24 10/100/1000Base-TX RJ45 ports plus 2 slots for 1000Base-SX or LX fiber
<b>10/100/1000Mbps Web Smart Ethernet Switch</b>	
GSW-1108	8 port web smart switch with 8 10/100/1000Base-TX RJ45 ports plus 2 slots for 1000Base-SX or LX fiber
GSW-1116	16 port web smart switch with 16 10/100/1000Base-TX RJ45 ports plus 2 slots for 1000Base-SX or LX fiber
GSW-1124	24 port web smart switch with 24 10/100/1000Base-TX RJ45 ports plus 2 slots for 1000Base-SX or LX fiber
<b>10/100/1000Mbps Unmanaged Ethernet Switch</b>	
GS-1008	8 port switch with 8 10/100/1000Base-TX RJ45 ports (does not have slots for 1000Base Fiber)
GS-1016	16 port switch with 16 10/100/1000Base-TX RJ45 ports plus 2 slots for 1000Base-SX or LX fiber
GS-1024	24 port switch with 24 10/100/1000Base-TX RJ45 ports plus 2 slots for 1000Base-SX or LX fiber
<b>SFP Fiber Modules for GS Models</b>	
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 (All Models):

- MAC Address Table
  - ▶ All Models: 8K
- Switching Mode
  - ▶ Store-and-forward
- Memory Buffer Size
  - ▶ GS-1116/1124: 272KB
  - ▶ GSM-2116/GSW-1116: 272KB
  - ▶ GSM-2124/GSW-1124: 400KB
  - ▶ GSM-2108/GSW-1108/GS-1008: 144KB
  - ▶ GSM/GSW: 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 (GSM models):

- ▶ Web-based, SNMP (v1, v2c), CLI, or 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

### MANAGEMENT FUNCTIONS (GSW models):

- ▶ Web-based
- ▶ Port setting for duplex and speed
- ▶ Port based and tagged VLANs (up to 8)
- ▶ Port trunking (4 groups)
- ▶ Port mirroring
- ▶ Broadcast storm suppression
- ▶ QoS

### NETWORK STANDARDS:

#### All Models

- ▶ IEEE 802.3
- ▶ IEEE 802.3u
- ▶ IEEE 802.3ab
- ▶ IEEE 802.3z
- ▶ IEEE 802.3x

#### GSM Models

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

#### GSW Models

- ▶ IEEE 802.1q
- ▶ IEEE 802.1p

### EMI/SAFETY COMPLIANCE (All Models):

FCC Part 15 Class A & CE Mark Approval

### NETWORK CABLE CONNECTORS (All Models):

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

### POWER SUPPLY (All Models):

- Internal power supply
- Input Voltage
  - ▶ 100 to 240 VAC, 50 to 60Hz

### Power Consumption

- ▶ 30 watts maximum

### OPERATING ENVIRONMENT (All Models):

- Ambient Temperature:
  - ▶ 32° to 122°F (0° to 50°C)
- Ambient Humidity (All Models except for GS2108):

- ▶ 5% to 90% (non-condensing)

GS2108: 0% to 90%

### MECHANICAL (All Models):

#### Enclosure:

- ▶ Rack mountable
- ▶ Cooling Method: Fan cooled

### PHYSICAL CHARACTERISTICS

#### 16 and 24 Port Models:

- Dimensions
  - ▶ 8.23 x 17.40 x 1.73 in
  - ▶ 209 x 442 x 44mm

#### Weight:

- ▶ 9.26lbs (4.2kg)

### PHYSICAL CHARACTERISTICS

#### 8 Port Models:

- Dimensions: GSM/GSW Models
  - ▶ 5.2 x 8.54 x 1.73 in
  - ▶ 132 x 217 x 44 mm

Dimensions: GS Models

- ▶ 4.72 x 7.56 x 1.38 in
- ▶ 120 x 192.35 mm

Weight: GSM/GSW Models

- ▶ 2.43lbs (1.1kg)

Weight: GS Models

- ▶ 1.75lbs (.79kg)

### WARRANTY:

Limited Lifetime      Made in USA