ProSwitch® GSM
Managed PoE Gigabit Switch

Model: GSM2224-POE-185W
**   GSM2224-POE-380W**

Key Highlights

▶ 24-port PoE switch

▶ PoE Functions

- 185 or 380 watts of power
- Auto detect powered devices and consumption levels
- Supports per port power consumption monitoring and per port priority setting
- Smart feature for PD on/off, detection, power level, status and power feeding priority
- Circuit protection

▶ Broadcast storm control

▶ Virtual stacking management

▶ Management functions include:
- Access via web and CLI
- SNMP
- RMON
- LLDP
- DHCP Option 82
- IGMP v3
- 802.1x network security
- QoS
- VLANs
- Multicast VLAN for IPTV
- IP MAC port binding
- GVRP
- Port mirroring
- Port trunking
- MAC address
- Spanning Tree
- TFTP firmware upgrade

▶ Rack mountable

▶ Backed by Waters' limited lifetime warranty

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GSM2224-POE Ethernet Switch
10/100/1000Mbps Switch

GSM2224-POE

Waters Network Systems' GSM2224 provide up to 24 PoE ports of 1000Mbps for your wiring closet requirements. The GSM2224-POE has 24 10/100/1000Base-TX ports plus 4 mini GBIC slots for 1000Base-SX or LX SFP fiber modules. Extend your network using singlemode up to 30km. Choose between 185 or 380 watts of total power.

Features and Benefits

● **PoE in all ports.** The GSM2224-POE switch provides either 185 or 380 watts of power to be supplied to end devices such as wireless access points, VoIP phones, security cameras or any other device that can be powered by PoE. Use your existing LAN cables which eliminates additional costs for AC wiring.

● **QoS supports layer 4 classification.** In addition to 802.1p Priority Queue support, the GSM2224 also supports 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.

● **Power savings features.** The GSM2224 delivers green power technology by using two advanced energy saving design functions, automatic power savings (APS) and power reach function (PRF). Energy savings of up to 80 percent can be achieved with the APS and PRF power savings performance features.

  1. APS mode detects and monitors Ethernet port status to reduce power consumption for unused or idle ports.

  2. PRF is an intelligent algorithm that actively determines and adjusts the appropriate power level required based on cable length.

● **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. Q-in-Q, the use of double VLAN tags, is an efficient method for enabling subscriber aggregation.

● **MAC-based 802.3ad LACP with automatic link fail-over.** Dynamic fail-over will not allow packets to be assigned to trunk member ports that have failed. If one of the ports fails, traffic will automatically be distributed to the remaining active ports.

● **802.1x Access control for improved network security.** The GSM2224 provides 802.1x which 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.

● **Rapid and Multiple Spanning Tree.** For mission critical environments with multiple switches supporting STP, you can configure the switches with a redundant backup bridge path. This feature assures the timely and accurate delivery of all data, voice and video packets. MSTP allows frames assigned to different VLANs to follow separate paths, each based on an independent Multiple Spanning Tree Instance.

GSM2224-POE Ethernet Switch

ORDERING INFORMATION

Model	Description
10/100/1000Mpbs Managed PoE Ethernet Switch	
GSM2224-POE-185W	24 port managed PoE switch with 24 10/100/1000Base-TX RJ45 ports plus 4 slots for 1000Base-SX or LX SFP fiber modules. 185 watts of PoE power. (24 usable ports)
GSM2224-POE-380W	24 port managed PoE switch with 24 10/100/1000Base-TX RJ45 ports plus 4 slots for 1000Base-SX or LX SFP fiber modules. 380 watts of PoE power. (24 usable ports)
SFP Fiber Modules for GSM-2224	
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 Mode
▸ Store-and-forward
Memory Buffer Size
▸ Jumbo frame support up to 9K
▸ 48Gbps switch capacity
Performance
▸ Non-blocking wiring speed
▸ Auto negotiation
▸ Auto-MDIX
▸ Back pressure flow control for half duplex
▸ Flow control for full duplex

POWER SAVINGS FEATURES
▸ Automatic Power Savings
▸ Power Reach Function

MANAGEMENT FUNCTIONS:
▸ Web-based, Console and SNMP
▸ Link Layer Discovery Protocol (LLDP) support
▸ Port setting for duplex and speed
▸ Port trunking (up to 12 groups)
▸ Port based and tagged VLANs
▸ Muticast VLAN management
▸ Port mirroring
▸ DHCP Option 82
▸ SNMP v1, v2c
▸ IGMP v3 snooping
▸ IGMP proxy
▸ IP MAC port binding
▸ 802.1x access control
▸ GVRP/GARP
▸ Broadcast/multicast storm suppression
▸ Q-in-Q Subscriber Aggregation
▸ Bandwidth control
▸ QoS
▸ LACP
▸ STP/RSTP/MSTP
▸ ACL
▸ SSL/SSH management
▸ Virtual stacking management (VSM)
▸ Enterprise MIB
▸ RFC1213MIB (MIB-II)

▸ RFC1757 RMON MIB
▸ RFC1493 Bridge MIB
▸ RFC1643 Ethernet MIB
▸ RMON

NETWORK STANDARDS:
▸ IEEE 802.3
▸ IEEE 802.3u
▸ IEEE 802.3ab
▸ IEEE 802.3af
▸ IEEE 802.3z
▸ IEEE 802.3x
▸ IEEE 802.1q
▸ IEEE 802.1p
▸ IEEE 802.1d/w
▸ IEEE 802.1x
▸ IEEE 802.1s
▸ IEEE 802.3ad

POE FUNCTIONS:
▸ Endpoint with 48VDC power through RJ45 pins 1, 2, 3 and 6
▸ PoE-PSE activity LED indicator
▸ Auto detect powered devices and consumption levels
▸ Supports per port power consumption monitoring and per port priority setting
▸ Smart feature for PD on/off, detection, power level, status and power feeding priority
▸ Circuit protection prevents power interference between ports
▸ Supports per port PoE state and power priority setting

EMI/SAFETY COMPLIANCE:
FCC Part 15 Class A & CE Mark Approval
ROHS Compliant
EN55022
EN61000-3
IEC61000-4

NETWORK CABLE CONNECTORS:
RJ45 shielded female ports
▸ 10/100Mbps: CAT5 UTP or better
▸ Multimode or singlemode with LC connectors

POWER SUPPLY:
Internal power supply
Input Voltage
▸ 100 to 240 VAC, 50 to 60Hz
Power Consumption
▸ 15 watts (no PoE device connected)
▸ GSM2224-POE-185: 185 watts
▸ GSM2224-POE-380: 380 watts

OPERATING ENVIRONMENT:

Ambient Temperature:
▸ 32° to 104°F (0° to 40°C)
Ambient Humidity:
▸ 5% to 90% (non-condensing)

MECHANICAL:
Enclosure:
▸ Rack mount
▸ Cooling Method: Fan cooled

PHYSICAL CHARACTERISTICS:
Dimensions
GSM2224-POE-185
▸ 9.8 x 17.40 x 1.73 in
▸ 248 x 442 x 44mm
GSM2224-POE-380
▸ 14.4 x 17.40 x 1.73 in
▸ 366 x 442 x 44mm

Weight:
GSM2224-POE-185
▸ 6.6lbs (3kg)
GSM2224-POE-380
▸ 12.6lbs (5.7kg)

WARRANTY:
Limited Lifetime