ProSwitch® GSM
Managed Fiber Switch

GSM3128F Fiber Switch

Model: GSM3128F

GSM3128F

Key Highlights

▸ 24 100Base-FX/1000Base-SX/LX ports

▸ 4 100/1000Base-TX ports

▸ 4 XFP slots for 10GbE modules

▸ 28 useable ports

▸ Energy Efficient

  • IEEE 802.3az
  • Uses low-power technology
  • Adjusts signal strength based on cable length

▸ Advanced Network Management

  • IPv4 and IPv6 support
  • SNMP
  • LLDP
  • S-Flow
  • SSL/SSH
  • ACLs
  • Guest VLANs
  • Private VLAN Edge (PVE)
  • Voice VLAN
  • IP Source Guard
  • RADIUS/TACACS
  • MAC Layer OAM
  • Ethernet CFM

▸ Convection cooled for quiet operation

▸ Backed by Waters' limited lifetime warranty

Waters Network Systems' GSM3128F switch delivers reliable intelligent 100Base-FX or 1000Base-SX/LX fiber connectivity from the core to the edge. The GSM3128F model provides the application intelligence, manageability and performance to support IP data, voice and video deployment for today's most demanding LAN applications. In additional to the fiber ports, there are also four 10/100/1000Base-TX ports available for copper connectivity plus four 10GbE XFP slots available for upgrades to 10 Gigabit.

Features and Benefits

● **Device management software.** All models incorporate an intuitive, web-based interface used to access the management functions. CLI access is also available.

● **Link Layer Discover Protocol (LLDP).** The GSM3128F supports IEEE 802.1ab standards based discovery protocol and provides vendor-independent device discovery. LLDP not only simplifies switch deployment and location of devices, but it can also be used as a troubleshooting, monitoring and firmware management tool.

● **QoS support.** The GSM3128F includes embedded QoS intelligence to prioritize services such as voice, easily unified deployments and helps ensure consistent network performance for all services.

The voice VLAN capabilities allow any IP phone to be plugged into the IP telephony network and receive an immediate dial tone. The switch will configure the device with network specific VLAN and QoS parameters to simplify voice traffic prioritization.

● **Network security.** The GSM3128F 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.

● **Power savings features.** Green power technology is delivered by the GSM3128F with the Energy Efficient Ethernet (EEE) option. EEE reduces power usage when there is a very low traffic utilization (or no traffic).

EEE works by powering down circuits when there is no traffic, and automatic PoE power shutoff is invoked when a line is down or set with the PoE scheduling function. Embedded intelligence is used to adjust power strength based on cable length.

GSM3128F-Ethernet Switch

ORDERING INFORMATION

Model	Description
10/100/1000Mpbs Managed Ethernet Switch	
GSM3128F-4C-10G	28-port managed switch with 24 100Base-FX/1000Base-SX/LX SFP ports plus 4 ports for 10/100/1000Base-TX and 4 ports for 10GbE XFP fiber modules (28 useable ports)
Fiber Modules	
SFP-100FX-LC	1 port 100Base-FX MM fiber module with LC connector
SFP-100FX-LC-SM10	1 port 100Base-FX SM (10km) fiber module with LC connector
SFP-100FX-LC-SM40	1 port 100Base-FX SM (40km) fiber module with LC connector
SFP-1000SX-LC	1 port 1000Base-SX MM fiber module with LC connector
SFP-1000LX-LC10	1 port 1000Base-LX SM (10km) fiber module with LC connector
SFP-1000LX-LC30	1 port 1000Base-LX SM (30km) fiber module with LC connector
XFP-10GbE-SRLC	1 port 10G MM XFP fiber module with LC connector
XFP-10GbE-LRLC-10	1 port 10G SM (10km) XFP fiber module with LC connector

SPECIFICATIONS

OPERATIONAL CHARACTERISTICS:
MAC Address Table
- 8K

Switching Capacity and Forwarding Rate
- 95.23Mpps (64-byte packets)
- 128Gbps switching capacity
- Frame size supported up to 9Kb

POWER SAVINGS FEATURES
- Energy detect
- Cable length detection

MANAGEMENT FUNCTIONS:
- Web-based and console
- Remote management SNMP
- Link layer discovery protocol (LLDP) support
- Port setting for duplex and speed
- Port trunking (up to 14 groups; up to 8 ports per group)
- VLANs
  - Port based
  - Tag based
  - MAC based
  - Management VLAN
  - Private VLAN Edge (PVE)
  - Voice VLAN
- Port mirroring
- DHCP Option 82
- SNMP v1, v2c and v3
- IGMP v1, v2 and v3 snooping
- IGMP querier
- IGMP proxy
- MLD v1 and v2 snooping
- SSH v1 and v2
- SSL
- 802.1x RADIUS authentication
- Port security
- IP source guard
- RADIUS / TACACS+ authentication
- Storm control
- ACLs
- QoS supports 8 hardware queues

- Supports strict priority and weighted round-robin (WRR); queue assignment based on DSCP and class of service
- IPv4
- IPv6 (Web/SSL, Telnet/SSH, ping, SNTP, TFTP, SNMP, Syslog
- Rate Limiting (ingress/egress)
- Dual image supported
- GARP/GVRP
- RMON
- Firmware upgrade
- s-Flow (RFC 3176)
- UpnP
- CIDR

NETWORK STANDARDS:
- IEEE 802.1ag
- IEEE 802.1d/w
- IEEE 802.1p
- IEEE 802.1q
- IEEE 802.1s
- IEEE 802.1x
- IEEE 802.3
- IEEE 802.3ad
- IEEE 802.3ah
- IEEE 802.3az
- IEEE 802.3ab
- IEEE 802.3u
- IEEE 802.3x
- IEEE 802.3z

GSM3128-POE FUNCTIONS:
- PoE-PSE activity LED indicator
- Auto detect powered devices and consumption levels
- Supports per port power consumption monitoring and per port priority setting
- Supports per port PoE state and power priority setting

EMI/SAFETY COMPLIANCE:

FCC Part 15 (CFR47) Class A & CE Mark
Approval UL60950 CSA 22.2

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

OPERATING ENVIRONMENT:
Cooling Method: Convection

Ambient Temperature:
- 32° to 104°F (0° to 40°C)
Storage Temperature
- -4° to 158°F (-20° to 70°C)
Ambient Humidity:
- 10% to 90% (non-condensing)

MECHANICAL:
Enclosure:
- Mounting kit available

PHYSICAL CHARACTERISTICS:
Dimensions:
- 17.4 x 1.73 x 12 in
- 442 x 44 x 300mm
Weight:
- 6.6lbs (3.012kg)

WARRANTY:
Limited Lifetime