# 9208-ETMG-4F

## **Managed Ethernet Gigabit Switch**

- 8 Gigabit ports for 10/100/1000 Ethernet links
- 4 advanced combination ports accept copper RJ45 or noise-immune fibre optic links up to 80+ km
- Fully managed w/ advanced features and security
- Flexible mounting on DIN rail or direct to panel
- Truly rugged design for -40 to +75°C operation
- Monitor port and ring status using Modbus
- Plug and Play Ethernet/IP™ and video surveilance

The 9208-ETMG-4F is an 8 port "all-Gigabit" industrial Ethernet managed switch that is designed to be rugged, reliable, real-time and secure. It combines compact DIN rail packaging, protected circuitry and powerful software to keep your system going even in the toughest conditions.

### **PRODUCT HIGHLIGHTS**

- 8 Gigabit ports for 10/100/1000 Ethernet links
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- Fully managed w/ advanced features and security
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### TROUBLE FREE OPERATION

- UL/CSA (CUL), CE, Hazardous Locations (Zone 2)
- -40 to +75°C operating temperature
- Dual (redundant) power inputs with spike protection
- Self-test and alarm output contact
- Rugged corrosion-resistant metal packaging
- DIN rail or direct panel mounting in multiple positions



### **REAL-TIME SECURE PERFORMANCE**

- Rapid Spanning Tree (RSTP) and Redundant Ring for fast redundant rings
- SNMPv1 and v2 network management
- SNMPv3 authentication & encryption for security
- · SNMP notifications (traps) for report on event
- Priority Queuing (QoS/CoS) for real-time operation
- IGMP for Multicast filtering (snooping & querying)
- VLAN for convenient traffic segregation
- Broadcast & multicast storm protection
- RMON & port mirroring for advanced diagnostics
- Security with HTTPS, SSL, SSH, SNMPv3 & more
- Easy configuration via Web, Telnet or CLI
- · Free field-installable firmware upgrades forever

208-ETMG-4F DRAFT



#### **SPECIFICATION**

#### **ETHERNET PERFORMANCE**

- · 8 Ethernet ports (all Gigabit)
- Ethernet switch type: managed
- · Store and forward wire speed switching
- Ethernet protocols supported by all IEEE 802.3
- RJ45 ports (shielded): 10/100/1000BaseTX
- RJ45 speed (10, 100 or 1000) auto-negotiation
- RJ45 MDI/MDIX auto-crossover
- RJ45 TD and RD polarity auto-polarity
- Ethernet isolation: 1500 VRMS 1 minute
- Four ports are combination gigabit ports that have both an RJ45 connector and SFP fibre connector. For each of these ports, only one of the connectors can be used at a time.
- SFP (pluggable) ports accepts mini-GBIC transceivers
- Fibre optic port speed: 1000Base or 100Base depending on transceiver populated
- Fibre optic port wavelength for typical gigabit transceivers: 850 nm (mm), 1310nm (sm) or 1550nm (long haul sm) center
- Fibre multimode (mm) typical 50 or 62.5/125μm (LC typical)
- Fibre singlemode (sm) typical: 9 or 10/125μm (LC typical)
- Fibre typ. distance (full duplex): 0.55-1.1km (mm); 10+ km (sm); up to 70+ km (long haul sm)
- See separate fibre transceiver datasheet for more details
- Typical latency <5μs plus frame time; varies on load and settings
- Full or half duplex operation configurable per port
- MAC addresses supported: 8192
- Memory bandwidth: 32Gbps
- Console ports: RS232 (RJ45) and USB

### **ETHERNET COMPLIANCE**

- IEEE 802.3ab/z (Gigabit 1000Mbps Ethernet links)
- IEEE 802.3u (Fast Ethernet 100Mbps for newer devices)
- IEEE 802.3 (10Mbps Ethernet supports legacy devices)
- IEEE 802.3x (Full-Duplex with Flow Control)
- IEEE 802.1D/w (Rapid Spanning Tree for redundant rings and Spanning Tree for interoperability)
- IEEE 802.1p (Priority Queuing QoS, CoS, ToS/DS)
- IEEE 802.1Q (VLAN for traffic segregation)

### **"OK" OUTPUT**

- Indicates power and operational status
- Voltage same as switch input voltage
- Maximum current output 0.5Amp

### **POWER INPUT**

- · Redundant input terminals
- Input power (typical with all ports linked and active)
  - 12W (8-ports without fibre)
  - 15W (8-ports with 4 fibre)
- Input voltage (all models) 10-30VDC
- Transient protection 15,000 watts peak
- Spike protection 5,000 watts (10 times for 10μS)

### **ENVIRONMENTAL**

- Operating temperature range -40 to +75°C
- Cold startup at -40°C
- Storage temperature range -40 to +85°C
- Humidity (non-condensing) 5 to 95% RH (conformal coating optional)
- Vibration IEC60068-2-6, -27, -32

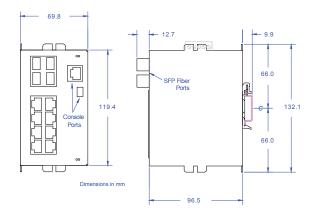
#### STANDARDS COMPLIANCE

- Electrical safety UL508/CSA C22.2/14: EN61010-1, CE
- EMC emissions and immunity FCC part 15, ICES-003; EN61000-6-4, EN61000-6-2, CE
- Hazardous locations: UL1604, CSA C22.2/213 (Class 1, Div. 2), EN60079-15 (Zone 2, Category 3), CE (ATEX)

#### **PHYSICAL**

- Corrosion-resistant aluminum with IP30 protection
- Din rail mounting or direct to panel (2 ways)
- Dimensions see mechanical drawing
- Weight 0.34kg (12oz.)

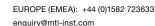
#### **MECHANICAL**



# **ORDERING INFORMATION**

9208-ETMG-4F Ethernet Gigabit managed switch with 8 RJ45 ports & 4 SFP slots

Special, mixed or long haul (up to 120km) fibre transceivers are available for special order.



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