



9210-ETM-3G-2F

Managed Ethernet Gigabit Switch

- 10 ports including
- 7 fast Ethernet 10/100 RJ45 ports
- 1 Gigabit Ethernet 10/100/1000 RJ45 port
- 2 Gigabit combo ports for copper or fibre
- High port count in a small footprint
- Truly rugged design with -40 to +75°C operation
- Easy to configure management functions
- Monitor port and ring status using Modbus
- Plug and Play Ethernet/IP™ and video surveillance



The 9210-ETM-3G-4F is a 10 port industrial Ethernet managed switch with 7 fast and 3 Gigabit ports of which two are combination ports that support both copper and fibre optic connections. This switch 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 under the toughest conditions.

Two Flexible Combination Gigabit Ports - your choice. Just connect to the RJ45 for a 10/100/1000Mbps auto-detecting copper link or plug in a fibre transceiver for a 100 or 1000Mbps noise-immune fibre link. These advanced ports give you the flexibility you need and make your job easier!

PRODUCT HIGHLIGHTS

- 10 ports including
- 7 fast Ethernet 10/100 RJ45 ports
- 1 Gigabit Ethernet 10/100/1000 RJ45 port
- 2 Gigabit combo ports for copper or fibre
- High port count in a small footprint
- Truly rugged design with -40 to +75°C operation
- Easy to configure management functions

TROUBLE FREE OPERATION

- -40 to +75°C operating range
- UL/CSA (CUL), CE and Hazloc (Zone 2) rated
- Dual (redundant) power inputs
- Industrial surge and spike protection
- Self-test/alarm output contact
- DIN rail or direct panel mounting

REAL-TIME SECURE PERFORMANCE

- Real-Time-Ring™ or Rapid Spanning Tree (RSTP) for fast redundant ring or mesh networks
- 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

SPECIFICATION

ETHERNET PERFORMANCE

- 10 Ethernet ports including 3 Gigabit
- Managed, store & forward, wire-speed
- All IEEE 802.3 Ethernet protocols supported
- RJ45 ports 1 - 7 (shielded) 10/100BaseTX
- RJ45 ports 8 - 10 (shielded) 10/100/1000BaseTX
- RJ45 port speed auto-negotiation
- RJ45 MDI/MDIX auto-crossover
- RJ45 TD and RD auto-polarity
- Ports 9 and 10 are combination gigabit ports that have both a 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 9 - 10 accept mini-GBIC transceivers
- Fibre optic port speed: 100Mbps or 1000Mbps
- Fibre typical specs (see separate datasheet for details)
- Multimode, 0.55km, 850nm, 50 or 62.5/125µm
- Singlemode, 10km, 1310nm, 9 or 10/125µm
- Long haul, up to 120+ km, 1550nm, 9 or 10/125µm
- Typical latency (varies on load & settings)
 - 10Mbps: 16µs + frame time
 - 100Mbps: 5µs + frame time
- Full or half duplex operation: configurable per port
- MAC addresses supported: 8192
- Memory bandwidth: 32Gbps
- Ethernet isolation: 1500VRMS 1 minute
- Console ports: USB and RS232 (RJ45)

ETHERNET COMPLIANCE

- IEEE 802.3z (Gigabit 1000Mbps Ethernet connections)
- 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)

REDUNDANT RING

- Link loss recovery: 30mS plus 5mS per hop
- Switches in a ring: <50 for best performance
- Multiple rings supported (configurable)

“OK” OUTPUT

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

POWER INPUT

- Reverse polarity protection
- Input power (typical with all ports active)
 - 5W (w/ no fibre plugged in)
 - 7W (w/ 2 fibre plugged in)
- Power input voltage 10-30VDC
- Transient protection 15,000 watts peak
- Spike protection 5,000 watts (10x 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

* Continuous operation at maximum operating temperature may reduce product life.

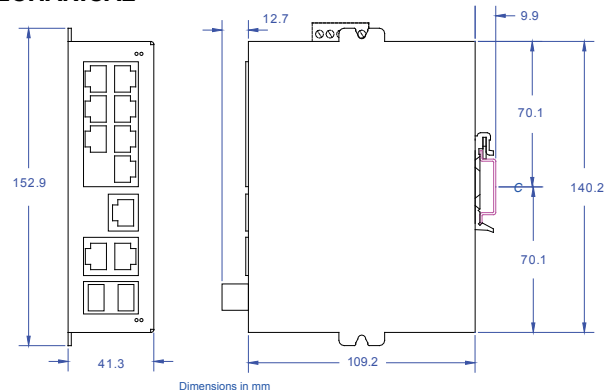
STANDARDS COMPLIANCE

- 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)
- RoHS and WEEE compliant
- ISO9001:2000 certified company

PHYSICAL

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

MECHANICAL



ORDERING INFORMATION

9210-ETM-3G-2F

10 port Ethernet switch with 3 Gigabit ports and 2 SFP slots

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

The given data is only intended as a product description and should not be regarded as a legal warranty of properties or guarantee. In the interest of further technical developments, we reserve the right to make design changes.



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