

EX9808C Series

8-port 10/100Base Fast Ethernet Hardened Managed Ethernet Switches



Overview

A member of the growing family of ruggedized switches from EtherWAN Systems, the EX9808C series addresses a requirement for a smaller switch than the other Rack Mount size. The EX9808C provides an affordable switch for rugged, outdoor environment, industrial factory floor, multi-tenant dwellings or Fiber To The Home (FTTH) applications.

Managed Switch:

The EX9808C series is a managed Fast Ethernet Switch in compact size, providing eight 10/100Mbps copper ports, or seven 10/100Mbps copper ports and one 100Mbps fiber port, or six 10/100Mbps copper ports and two 100Mbps fiber ports.

Low-Cost of Ownership:

Featuring full SNMP management capabilities as well as RMON support, the EX9808C is a very sophisticated switch for its price range. Also included are features such as port trunking and VLAN tagging. The EX9808C functions at

temperatures ranging from -40°C to 75°C (-40°F to 167°F) and is tested for functional operation @ -40°C to 85°C (-40°F to 185°F), this is the switch of choice for environments constrained by space.

Features

- ▶ Complies with NEMA TS1 & TS2 Environmental requirements for Traffic control equipment
- ▶ Complies with IEC61000-6-2 EMC Generic standard immunity for Industrial environment
- ▶ IEEE802.1w RSTP and IEEE802.1D STP compatible
- ▶ IP Multicast Filtering through IGMP Snooping
- ▶ Supports port-based VLAN and IEEE802.1Q VLAN Tagging and GVRP
- ▶ IEEE802.1p QOS classification based on: Port-based priority; VLAN priority field in VLAN tagged frame; DS/TOS field in IP packet; UDP/TCP logical ports
- ▶ Eight port-based trunking groups with up to 8 ports per group
- ▶ RS-232 console, Telnet, SNMP V1 & V2, RMON, Web Browser, and TFTP Management
- ▶ Rate Control
- ▶ Packet Filtering and Port Security: Destination MAC; Static MAC address not subject to aging; Secure mode freezes MAC address learning
- ▶ Port mirroring
- ▶ 4096 MAC addresses
- ▶ 2M bits buffer memory
- ▶ 10/100Mbps-Full/Half-duplex, Auto-Negotiation, Auto-MDI/MDIX
- ▶ Full wire-speed forwarding rate
- ▶ 0.6A 12VDC external universal PSU
- ▶ -40°C to 75°C (-40°F to 167°F) operating temperature range
- ▶ Hardened metal case
- ▶ Supports Wall Mounting installation

Ordering Information

EX9808C	8-port 10/100Base-TX Hardened Managed Ethernet Switch
EX9808CFT1	7-port 10/100Base-TX + 1-port 100Base-FX Multi Mode (ST) -2Km Hardened Managed Ethernet Switch
EX9808CFT2	6-port 10/100Base-TX + 2-port 100Base-FX Multi Mode (ST) -2Km Hardened Managed Ethernet Switch
EX9808CFC1	7-port 10/100Base-TX + 1-port 100Base-FX Multi Mode (SC) -2Km Hardened Managed Ethernet Switch
EX9808CFC2	6-port 10/100Base-TX + 2-port 100Base-FX Multi Mode (SC) -2Km Hardened Managed Ethernet Switch
EX9808CFC1-15	7-port 10/100Base-TX + 1-port 100Base-FX Single Mode (SC) -15Km Hardened Managed Ethernet Switch
EX9808CFC2-15	6-port 10/100Base-TX + 2-port 100Base-FX Single Mode (SC) -15Km Hardened Managed Ethernet Switch
EX9808CFC1-40	7-port 10/100Base-TX + 1-port 100Base-FX Single Mode (SC) -40Km Hardened Managed Ethernet Switch
EX9808CFC2-40	6-port 10/100Base-TX + 2-port 100Base-FX Single Mode (SC) -40Km Hardened Managed Ethernet Switch
EX9808CFC1-20	7-port 10/100Base-TX + 1-port 100Base-FX Single Mode (SC) WDM -TX :1310nm/RX:1550nm -20Km Hardened Managed Ethernet Switch
EX9808CFCB1-20	7-port 10/100Base-TX + 1-port 100Base-FX Single Mode (SC) WDM -TX :1550nm/RX:1310nm -20Km Hardened Managed Ethernet Switch
EX9808CFC1-40	7-port 10/100Base-TX + 1-port 100Base-FX Single Mode (SC) WDM -TX :1310nm/RX:1550nm -40Km Hardened Managed Ethernet Switch
EX9808CFCB1-40	7-port 10/100Base-TX + 1-port 100Base-FX Single Mode (SC) WDM -TX :1550nm/RX:1310nm -40Km Hardened Managed Ethernet Switch
EX9808CFC2-20	6-port 10/100Base-TX + 2-port 100Base-FX Single Mode (SC) WDM -TX :1310nm/RX:1550nm -20Km Hardened Managed Ethernet Switch
EX9808CFCB2-20	6-port 10/100Base-TX + 2-port 100Base-FX Single Mode (SC) WDM -TX :1550nm/RX:1310nm -20Km Hardened Managed Ethernet Switch
EX9808CFC2-40	6-port 10/100Base-TX + 2-port 100Base-FX Single Mode (SC) WDM -TX :1310nm/RX:1550nm -40Km Hardened Managed Ethernet Switch
EX9808CFCB2-40	6-port 10/100Base-TX + 2-port 100Base-FX Single Mode (SC) WDM -TX :1550nm/RX:1310nm -40Km Hardened Managed Ethernet Switch

Specifications

Technology

Standards:

- IEEE802.3 10Base-T, IEEE802.3u 100Base-TX/100Base-FX, IEEE802.3x, IEEE802.1Q, IEEE802.1p, IEEE802.1w

Protocols:

- IGMP, GVRP, SNMP V1/V2, RMON, TFTP

Forward and Filtering Rate:

- 14,880pps for 10Mbps
- 148,810pps for 100Mbps

Packet Buffer Memory:

- 2M bits

Processing Type:

- Store-and-Forward
- Half-duplex back-pressure and IEEE802.3x full-duplex flow control

Address Table Size:

- 4096 MAC addresses

Latency:

- Less than 9.6μs

Power

Input:

- Input Voltage: 12VDC

Power Consumption:

- 7.2W Max. 0.6A@12VDC

Overload Current Protection:

- Present

Mechanical

Casing:

- Metal case
- IP30

Dimensions:

- 200mm (W) x 134.3mm (D) x 35mm (H)
(7.87" (W) x 5.29" (D) x 1.38" (H))

Weight:

- 0.8Kg (1.76lbs.)

Installation:

- Wall Mounting

Interface

Ethernet Port:

- 10/100Base-TX: 8, 7 or 6 ports
- 100Base-FX: 0, 1 or 2 ports

Console Port:

- Port: One DB9 RS-232 port

LED Indicators:

- Per Unit: Power Status (Power)
- Per Port: 10/100TX, 100FX: Link/Activity, Speed, Full-duplex/Collision

Environment

Operating Temperature:

- -40°C to 75°C (-40°F to 167°F)
Tested @ -40°C to 85°C (-40°F to 185°F)

Storage Temperature:

- -40°C to 85°C (-40°F to 185°F)

Ambient Relative Humidity:

- 5% to 95% (non-condensing)

Regulatory Approvals

ISO:

- Manufactured in an ISO9001 facility

Safety:

- UL60950-1, EN60950-1, IEC60950-1

EMI:

- FCC Part 15, Class A
- EN61000-6-3
 - EN55022
 - EN61000-3-2
 - EN61000-3-3

EMS:

- EN61000-6-2
 - EN61000-4-2 (ESD Standards)
Contact: + / - 4KV; Criteria B
Air: + / - 8KV; Criteria B
 - EN61000-4-3 (Radiated RFI Standards)
10V/m, 80 to 1000MHz; 80% AM Criteria A
 - EN61000-4-4 (Burst Standards)
Signal Ports: + / - 4KV; Criteria B
D.C. Power Ports: + / - 4KV; Criteria B
A.C. Power Ports: + / - 4KV; Criteria B
 - EN61000-4-5 (Surge Standards)
Signal Ports: + / - 1KV; Line-to-Line; Criteria B
D.C. Power Ports: + / - 0.5KV; Line-to-earth; Criteria B
A.C. Power Ports: + / - 2KV; Line-to-earth; Criteria B
 - EN61000-4-6 (Induced RFI Standards)
Signal Ports: 10Vrms @ 0.15~80MHz; 80% AM Criteria A
D.C. Power Ports: 10Vrms @ 0.15~80MHz; 80% AM Criteria A
A.C. Power Ports: 10Vrms @ 0.15~80MHz; 80% AM Criteria A
 - EN61000-4-8 (Magnetic Field Standards)
30A/m @ 50, 60Hz; Criteria A
 - EN61000-4-11 (Voltage Dip Standards)
A.C. Power Ports: 30% Reduction for 0.5 period; Criteria B

Environmental Test Compliance:

- IEC60068-2-6 Fc (Vibration Resistance)
5g @ 10~150KHz, Amplitude 0.35mm (Operation/Storage/Transport)
- IEC60068-2-27 Ea (Shock)
25g @ 11ms (Half-Sine Shock Pulse; Operation)
50g @ 11ms (Half-Sine Shock Pulse; Storage/Transport)
- IEC60068-2-32 Ed (Free Fall)
1M (3.281ft.)

NEMA TS1/2 Environmental requirements for Traffic control equipment

Diagrams

