

Features ▶▶▶

- Automatic MDI/MDI-X crossover for plug-and-play
- Each port supports both 10/100 Mbps speed auto negotiation
- Full duplex IEEE 802.3x and half duplex backpressure flow control
- Supports wide operating temperatures from -30 °C ~ +75 °C
- Built-in Cyber-Ring redundant technique
- Redundant Dual Power Inputs +12 V_{DC} ~ +48 V_{DC}
Power failure alarm by relay output
- Modbus remote monitoring
- Supports Modbus OPC Server
- Store-and-forward architecture
- Frame buffer memory: 1 Mbit
- 2048 MAC addresses
- 3.2 Gbps high performance memory bandwidth
- DIN-Rail Mounting, Wall Mounting

Introduction

The MSM-508F series is an 8-port Industrial Ethernet Layer 2 Managed Switch with 2-Fiber Port that secures data transmission by using fiber optic transmission to provide immunity from EMI/RFI interference. It is a perfect solution for applications where transmission must be protected from electrical exposure, surges, lightning or chemical corrosion.

It can be managed through RS-232 port via serial console or Ethernet port using telnet or Web browser. In addition, the switch supports a lot of powerful managed functions, such as 802.1Q Tag-based VLAN, Port-based VLAN, 802.1p QoS (Quality of Service), Port Trunking, Spanning Tree, Cable Testing and Port Mirroring.

Built-in ICP DAS Cyber-Ring technique enables multiple switches to be placed into a redundant ring. Typically the switch detects and recovers from a fiber or copper link failure within approximately 20 ms – for the majority of applications, it is seamless. Modbus/TCP, Modbus/RTU and OPC supported, SCADA application can monitor status of Ethernet and fiber port with Modbus or OPC protocol.

MSM-508F provides two power inputs that can be connected simultaneously to live DC power sources. If one of the power inputs fails, the other live source will act as a backup to automatically support the it's power needs. And the relay output facility can deliver warning signal while power or network link failure.

Specifications

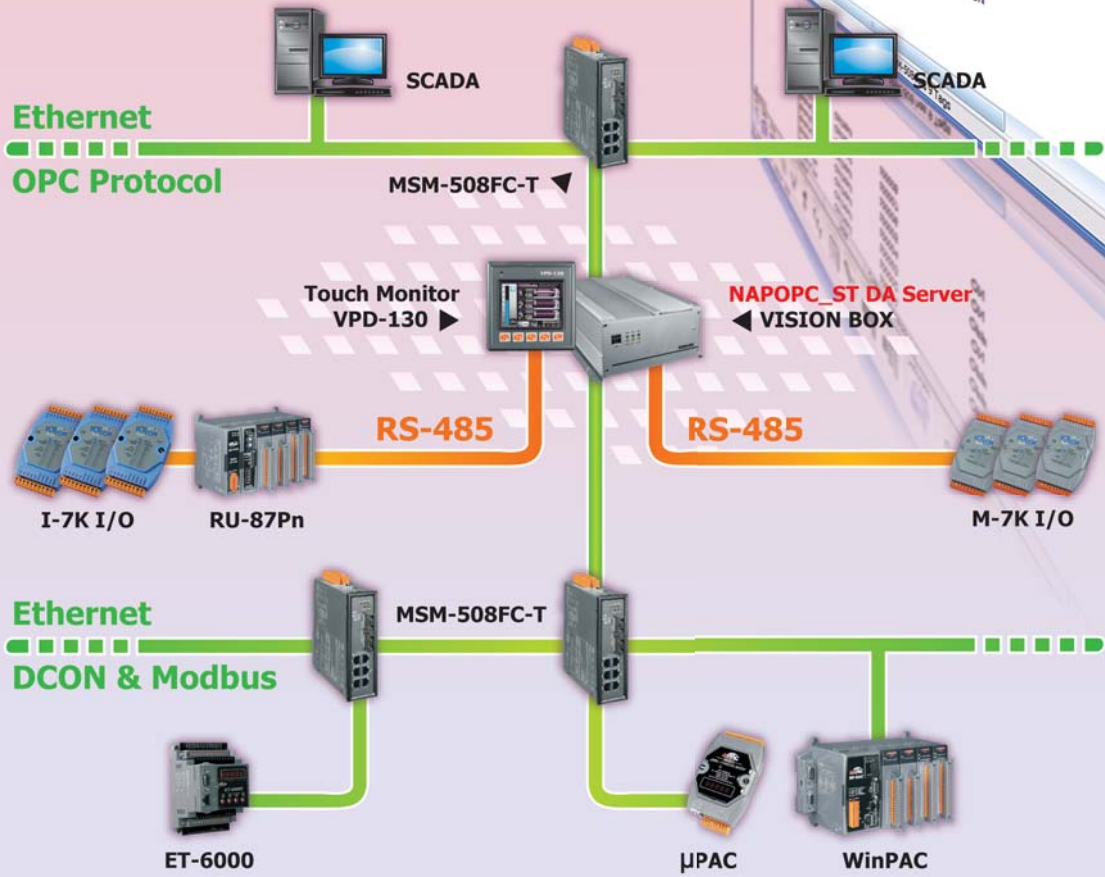
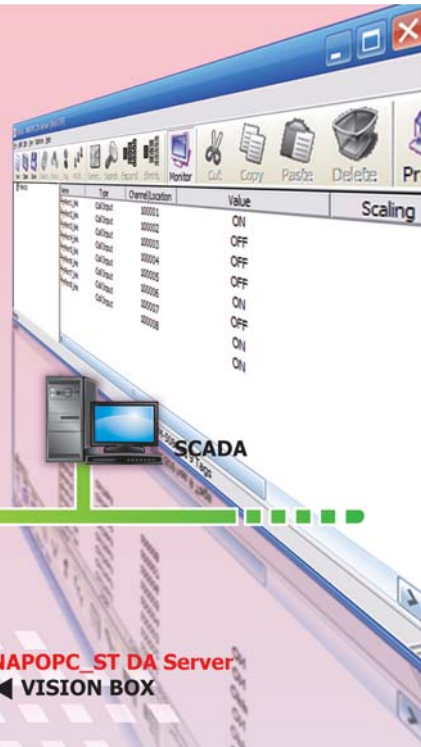
Models	MSM-508FT-T	MSM-508FC-T	MSM-508FCS-T	MSM-508FCS-60T
Technology				
Standards	IEEE 802.3, 802.3u and 802.3x			
Processing Type	Store & forward, wire speed switching			
MAC Addresses	2048			
Memory Bandwidth	3.2 Gbps			
Frame Buffer Memory	1 Mbit			
Flow Control	IEEE 802.3x flow control, back pressure flow control			
Protocol	VLAN, QoS, Port Trunk, SMTP, TELNET			

Specifications

Models	MSM-508FT-T	MSM-508FC-T	MSM-508FCS-T	MSM-508FCS-60T
LED Indicators				
Status	10/100M, Link/Act, Full duplex/Half duplex (Fiber Port)			
Ethernet				
Ports	6 x RJ-45, 10/100Base-TX			
Standards	IEEE 802.3, 802.3u and 802.3x			
Processing Type	Store & forward, wire speed switching			
MAC Addresses	2048			
Memory Bandwidth	3.2 Gbps			
Frame Buffer Memory	1 Mbit			
Flow Control	IEEE 802.3x flow control, back pressure flow control			
Protocol	VLAN, QoS, Port Trunk, SMTP, TELNET			
Redundant Strategy	STP, Ring (ICP DAS)			
Isolation	1500 Vrms 1 minute			
DIP Switch	Yes, Normal Run / Repair Mode			
Fiber				
Ports	2-port 100 Base-FX ST connector	2-port 100 Base-FX SC connector		
Mode	Multi-Mode		Single-Mode	
Fiber Cable	50/125, 62.5/125 or 100/140 μm		8.3/125, 8.7/125, 9/125 or 10/125 μm	
Distance	2 km, (62.5/125 μm recommended) for full duplex		30 km, (9/125 μm recommended) for full duplex	60 km, (9/125 μm recommended) for full duplex
Wavelength	1300 or 1310 nm			
TX Output	-20 dBm Min. -14 dBm Max.	-15 dBm Min. -8 dBm Max.	-5 dBm Min. 0 dBm Max.	
RX Sensitivity	-34 ~ -31 dBm	-36 ~ -31 dBm	-35 dBm	
Digital Input				
Channels	3			
Type	Wet Contact			
Wet Contact, ON Voltage Level	+19 VDC ~ +30 VDC			
Wet Contact, OFF Voltage Level	+11 VDC Max.			
Digital Output				
Channels	3			
Type	Open Collector			
Sink/Source (NPN/PNP)	Sink/NPN			
Max. Load Current	30V/100 mA Max.			
COM Ports				
Ports	1 x RS-232 (Console) 1 x RS-485			
Power				
Reverse Polarity Protection	Yes			
Input Range	+12 VDC ~ +48 VDC Redundant Dual Inputs (Non-isolated)			
Redundant Power Inputs	Yes			
Consumption	0.3 A @ 24 VDC			
Alarm Contact	Yes, Relay 2 A @ 30 VDC			
Mechanical				
Casing	Metal			
Dimensions (W x L x H)	DIN-rail mounting: 47 mm x 175 mm x 142 mm Wall mounting: 51 mm x 190 mm x 142 mm			
Installation	DIN-rail mounting or wall mounting			
Ingress Protection Rating	IP30			
Environmental				
Operating Temperature	-30 $^{\circ}\text{C}$ ~ +75 $^{\circ}\text{C}$			
Storage Temperature	-40 $^{\circ}\text{C}$ ~ +85 $^{\circ}\text{C}$			
Humidity	10% ~ 90% RH, non-condensing			

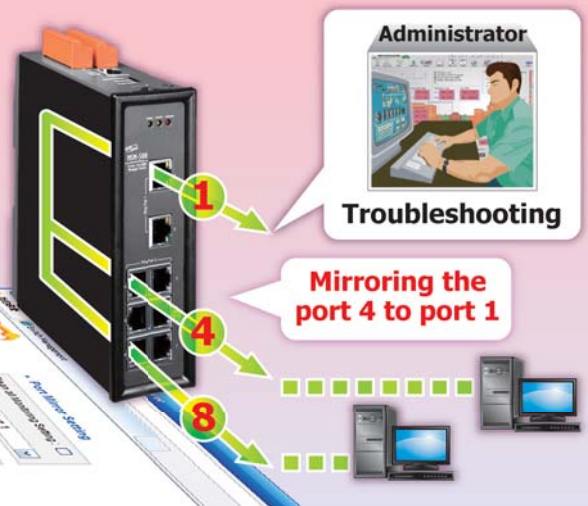
OPC Server

NAPOPC_ST DA Server is a free OPC DA Server (The "OPC" stands for "OLE for Process Control" and the "DA" stands for "Data Access") for ICP DAS products. NAPOPC_ST DA Server provides many benefits to users such as reduce time through lower system integration costs, integrate easily with plug-and-play SCADA/HMI/Database, connect and interoperate easily to custom applications, access to data by anyone in the automation hierarchy, reduce troubleshooting and maintenance cost, write to devices synchronously and asynchronously.

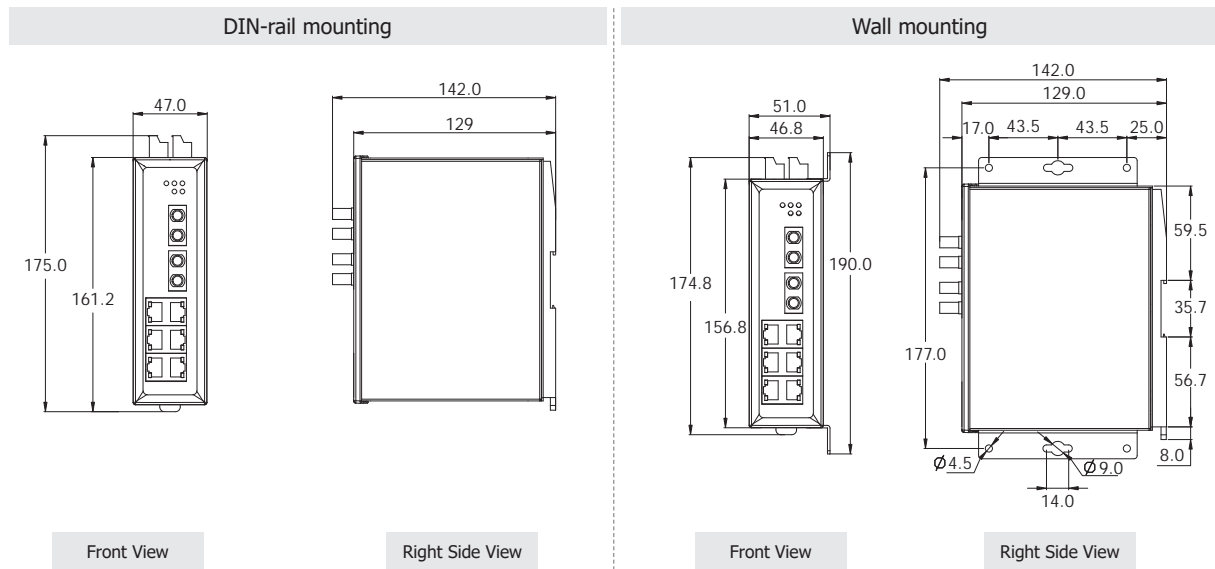


Port Mirroring

Port Mirroring is used on a network switch to send a copy of network packets seen on one switch port to a network monitoring connection on another switch port. This is commonly used for network appliances that require monitoring of network traffic, such as an intrusion-detection system. Network Engineers or Administrators use port mirroring to analyze and debug data or diagnose errors on a network. It helps the administrator keep a close eye on network performance and will alert them when problems occur. It can be used to mirror either inbound or outbound traffic on single or multiple interfaces.



Dimensions (Units: mm)



Ordering Information

MSM-508FT-T CR	8-port Layer 2 Managed Switch with 2-Fiber Port, Multi-mode, ST Connector (RoHS) Includes CA-090510 Console Cable and 4SIX1K0000003 Wall mount
MSM-508FC-T CR	8-port Layer 2 Managed Switch with 2-Fiber Port, Multi-mode, SC Connector (RoHS) Includes CA-090510 Console Cable and 4SIX1K0000003 Wall mount
MSM-508FCS-T CR	8-port Layer 2 Managed Switch with 2-Fiber Port, Single-mode, SC Connector (RoHS) Includes CA-090510 Console Cable and 4SIX1K0000003 Wall mount
MSM-508FCS-60T CR	8-port Layer 2 Managed Switch with 2-Fiber Port, Single-mode 60 km, SC Connector (RoHS) Includes CA-090510 Console Cable and 4SIX1K0000003 Wall mount