MSM-508F Series

8-port Industrial Ethernet Layer 2 Managed Switch with 2-Fiber Port

▣ 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
- ■ Built-in Cyber-Ring redundant technique
- ■ Power failure alarm by relay output
- ■ Modbus remote monitoring
- ■ Supports Modbus OPC Server
- ■ Store-and-forward architecture
- ■ Multi-mode, SC Connector Fiber supports

CE   UKCA   FC   RoHS

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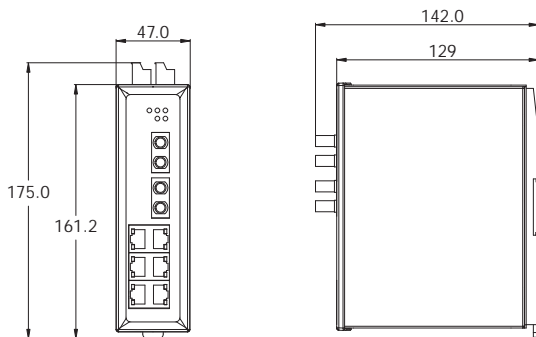
It can be managed through RS-232 port via serial console or Ethernet port using telnet or Web browser. In addition, the switch supports a lot of powerful managed functions, such as 802.1Q Tag-based VLAN, Port-based VLAN, 802.1p QoS (Quality of Service), Port Trunking, Spanning Tree, Cable Testing and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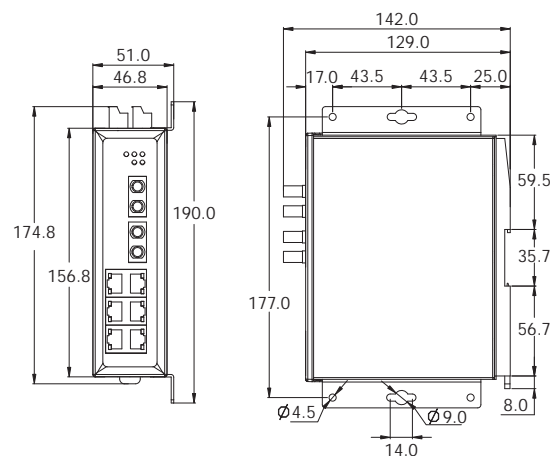
◼ Dimensions (Units: mm)

DIN-rail mounting
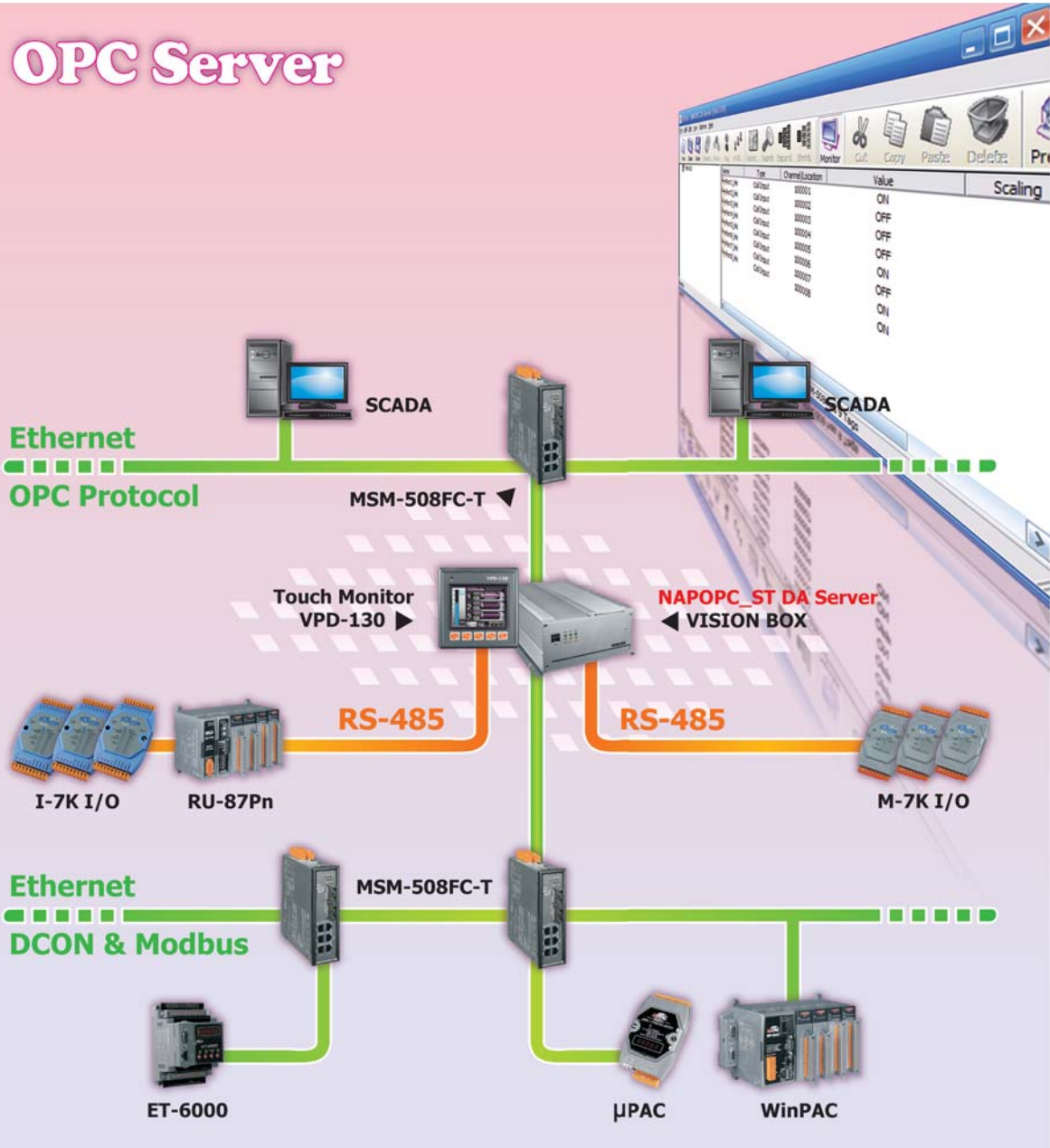

Front View   Right Side View

Wall mounting

Front View   Right Side View

■ Specifications

Model	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 Table	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			
ON Voltage Level	+19 VDC ~ +30 VDC			
OFF Voltage Level	+11 VDC Max.			
Digital Output				
Channels	3			
Type	Open Collector			
Sink/Source (NPN/PNP)	Sink (NPN)			
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 Output	Yes,Relay 2 A @ 30 VDC			
Mechanical				
Casing	Metal			
Dimensions (mm)	DIN-rail mounting: 47 x 175 x 142 (W x L x H) Wall mounting: 51 x 190 x 142 (W x L x H)			
Installation	DIN-rail mounting or wall mounting			
Ingress Protection Rating	IP30			
Environment				
Operating Temperature	-30 °C ~ +75 °C			
Storage Temperature	-40 °C ~ +85 °C			
Humidity	10 ~ 90% RH, non-condensing			

OPC Server

Port Mirroring

■ 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