

## MSM-506F Series *Available soon*

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

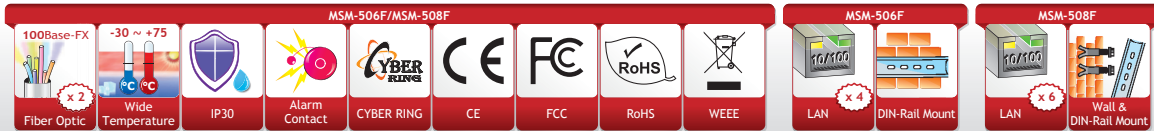
## MSM-508F Series *NEW*

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

MSM-506F Series



MSM-508F Series



### 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<sub>DC</sub> ~ +48 V<sub>DC</sub>  
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

### 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.

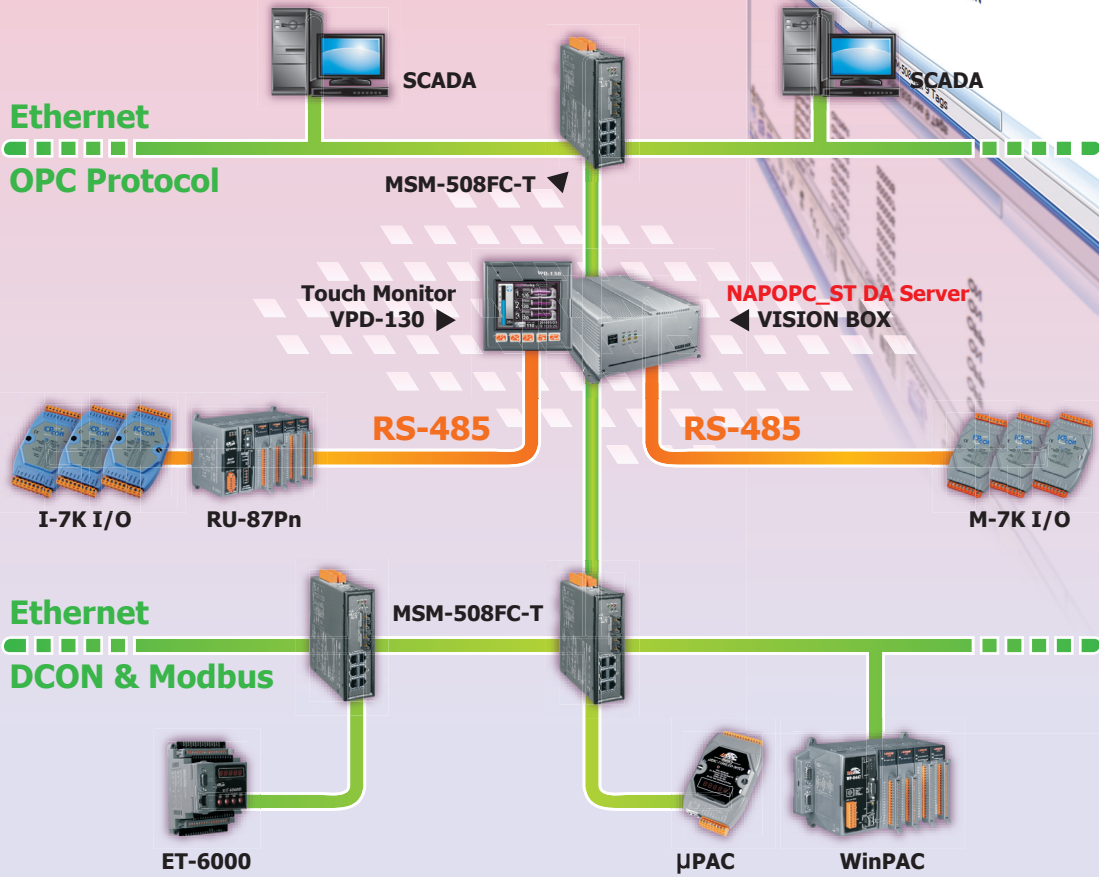
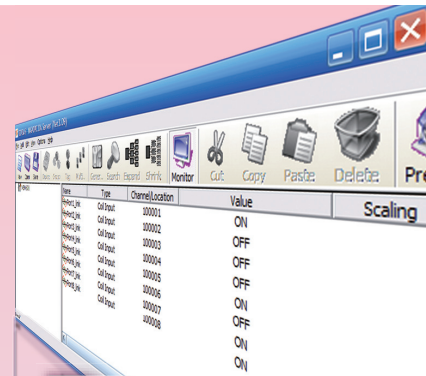
MSM-506F/MSM-508F provides two power inputs that can be connected simultaneously to live DC power sources. If one of the power inputs fails, the other live source will act as a backup to automatically support the it's power needs. And the relay output facility can deliver warning signal while power or network link failure.

 Specifications

Models	MSM-506FC-T MSM-506FCS-T Series	MSM-506FT-T Series	MSM-508FC-T MSM-508FCS-T Series	MSM-508FT-T Series
<b>Technology</b>				
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			
<b>Interface</b>				
RJ-45 Ports	<del>4-port 10/100 Base-TX auto negotiation speed, F/H duplex mode, and auto MDI/MDI-X connection</del>		6-port 10/100 Base-TX auto negotiation speed, F/H duplex mode, and auto MDI/MDI-X connection	
Fiber Optics Port	2-port 100 Base-FX			
LED Indicators	10/100M, Link/Act, Full duplex/Half duplex (Fiber Port)			
Ethernet Isolation	1500 V <sub>rms</sub> 1 minute			
Multi-mode	Multi-mode Fiber Cables	50/125, 62.5/125 or 100/140 μm		
	Distance	2 km, (62.5/125 μm recommended) for full duplex		
	Wavelength	1300 or 1310 nm		
	Min. TX Output	-20 dBm		
	Max. TX Output	-14 dBm		
Single-mode	RX Sensitivity	-34 ~ -31 dBm		
	Single-mode Fiber Cables	8.3/125, 8.7/125, 9/125 or 10/125 μm		
	Distance	30 km, (9/125 μm recommended) for full duplex		
	Wavelength	1300 nm or 1310 nm		
	Min. TX Output	-15 dBm		
Max. TX Output	-8 dBm			
RX Sensitivity	-36 dBm ~ -31 dBm			
COM1	RS-232 (TxD, RxD and GND); Non-isolated			
COM2	RS-485 (D2+, D2-; self-tuner ASIC inside); Non-isolated			
Frame Ground for EMS Protection	Yes			
<b>Digital Input/Output</b>				
Digital Input	-		3-channel, Wet Contact, L: +11 V <sub>dc</sub> Max., H: +19 V <sub>dc</sub> ~ +30 V <sub>dc</sub>	
Digital Output	-		3-channel, Open Collector, Sink/NPN, 30V/100 mA Max.	
<b>Power</b>				
Input Voltage Range	+12 V <sub>DC</sub> ~ +48 V <sub>DC</sub> Redundant Dual Inputs (Non-isolated)			
Power Consumption	0.2 A @ 24 V <sub>DC</sub>		0.3 A @ 24 V <sub>DC</sub>	
LED Indicator	Yes			
Protection	Power reverse polarity protection			
Frame Ground for EMS Protection	Yes			
Connector	6-Pin Removable Terminal Block		20-Pin Removable Terminal Block	
<b>Mechanical</b>				
Casing	Metal			
Environmental Rating	IP30 Protection			
Dimensions (W x L x H) (Units: mm)	<del>25 x 131 x 168</del>	25 x 131 x 168	47 x 140 x 175	47 x 142 x 175
Installation	DIN-Rail Mounting		DIN-Rail Mounting or Wall mounting	
<b>Environmental</b>				
Operating Temperature	-30 °C ~ +75 °C			
Storage Temperature	-40 °C ~ +85 °C			
Ambient Relative Humidity	10% ~ 90% RH, non-condensing			
<b>Accessories</b>				
Included Cable	CA-090510 x 1			

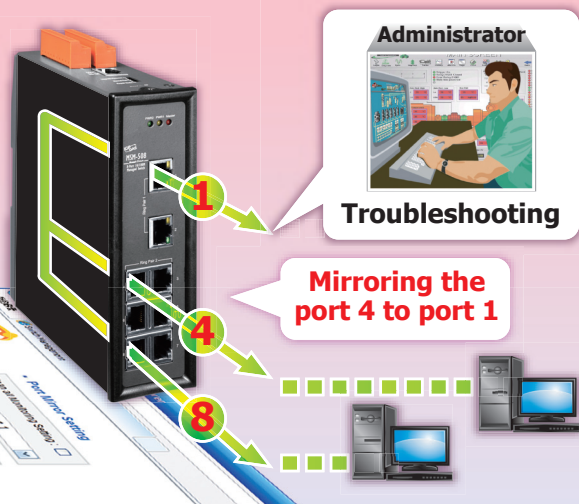
# OPC Server

**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.

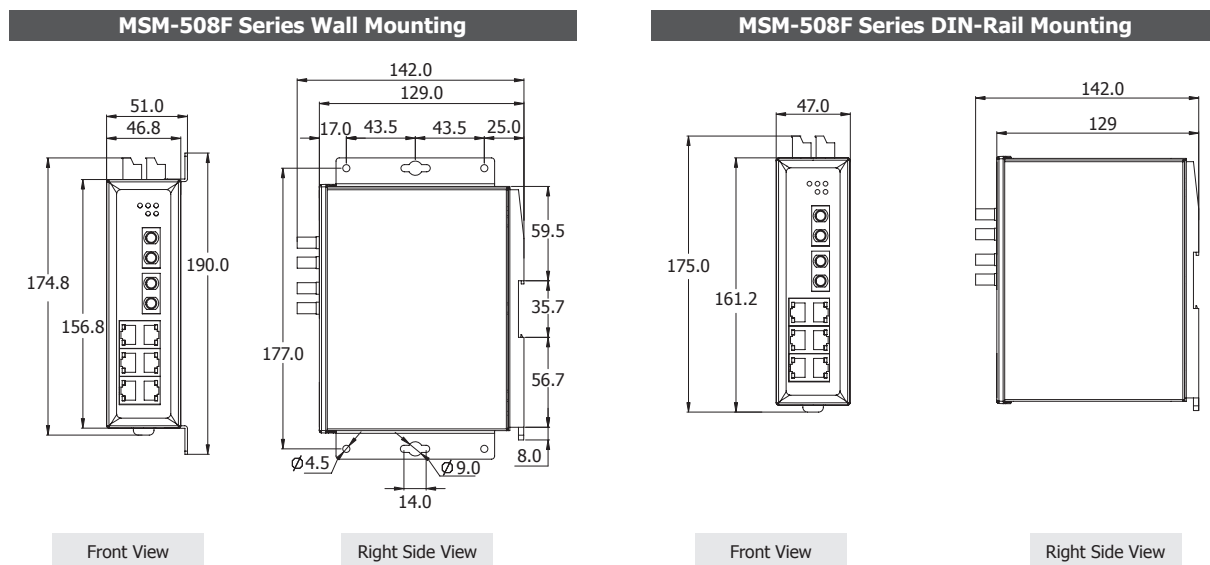
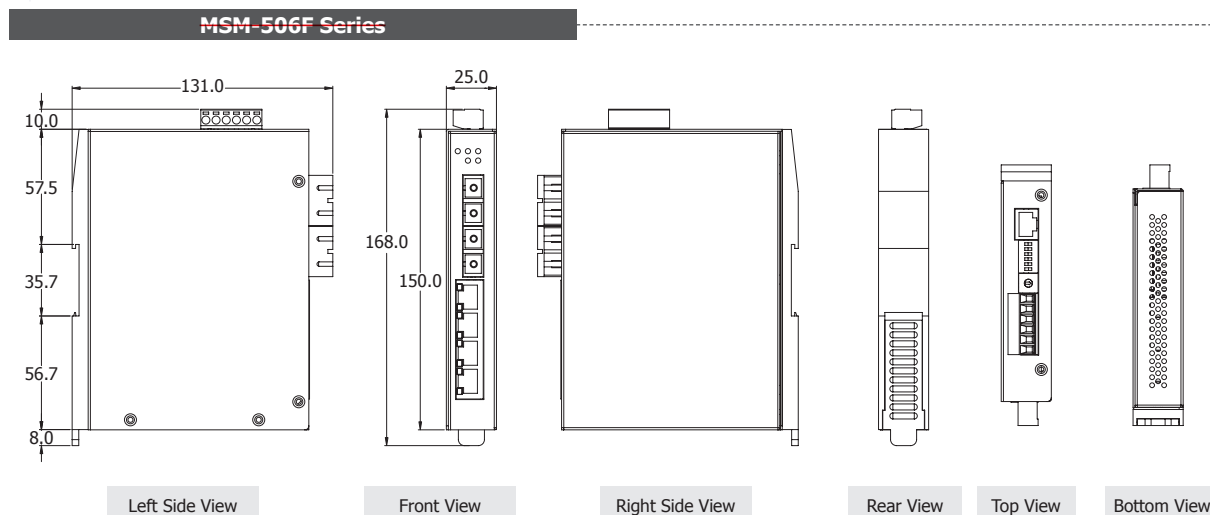


# Port Mirroring

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-506FT-T CR	6-port Layer 2 Managed Switch with 2-Fiber Port, Multi-mode, ST Connector (RoHS)
MSM-506FC-T CR	6-port Layer 2 Managed Switch with 2-Fiber Port, Multi-mode, SC Connector (RoHS)
MSM-506FCS-T CR	6-port Layer 2 Managed Switch with 2-Fiber Port, Single-mode, SC Connector (RoHS)
MSM-506FCS-60T CR	6-port Layer 2 Managed Switch with 2-Fiber Port, Single-mode 60 km, SC Connector (RoHS)
MSM-508FT-T CR	8-port Layer 2 Managed Switch with 2-Fiber Port, Multi-mode, ST Connector (RoHS)
MSM-508FC-T CR	8-port Layer 2 Managed Switch with 2-Fiber Port, Multi-mode, SC Connector (RoHS)
MSM-508FCS-T CR	8-port Layer 2 Managed Switch with 2-Fiber Port, Single-mode, SC Connector (RoHS)
MSM-508FCS-60T CR	8-port Layer 2 Managed Switch with 2-Fiber Port, Single-mode 60 km, SC Connector (RoHS)

## Accessories

CA-090510	9-Pin Female D-Sub & RJ-45 Cable, 1 M Cable
MDR-20-24	24 V/1 A, 24 W Power Supply with DIN-Rail Mounting
MDR-60-48	48 V/1.25 A, 60 W Power Supply with DIN-Rail Mounting
DIN-KA52F	24 V/1.04 A, 25 W Power Supply with DIN-Rail Mounting
DR-120-24	24 V/5 A, 120 W Power Supply with DIN-Rail Mounting