

MSM-506 *Available soon*

6-port Industrial Ethernet Layer 2 Managed Switch

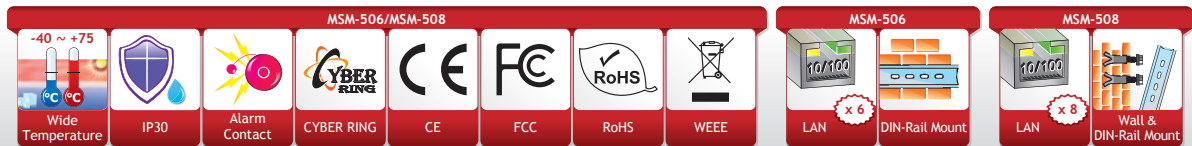
MSM-508

8-port Industrial Ethernet Layer 2 Managed Switch

MSM-506



MSM-508



Features ▶▶▶

- Automatic MDI/MDI-X crossover for plug-and-play
- Each port supports both 10/100 Mbps speed auto negotiation
- Supports wide operating temperature -40 °C ~ +75 °C
- Full duplex IEEE 802.3x and half duplex backpressure flow control
- 3.2 Gbps high performance memory bandwidth
- Redundant Dual Power Inputs +12 V_{DC} ~ +48 V_{DC}
Power failure alarm by relay output
- Frame buffer memory: 1 Mbit
- 2048 MAC addresses
- Store-and-forward architecture
- DIN-Rail Mounting
- Modbus remote monitoring
- Supports Modbus OPC Server
- Built-in Cyber-Ring redundant technique

Introduction

The MSM-506/MSM-508 is a 6-port/8-port Industrial Ethernet (10/100 Base-TX) Layer 2 Managed Switch. MSM-506/MSM-508 supports 10/100M auto negotiation feature and auto MDI/MDI-X function. It can automatically switch the transmission speed (10 Mbps or 100 Mbps) for corresponding connections. The connectors of Ethernet port are shielded RJ-45. The shielded RJ-45 connectors offer a high reliability Ethernet environment for industrial control and automation.

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 that enable multiple switches to be placed into a redundant ring. Typically the switch detects and recovers from a copper link failure within approximately 20 ms – for the majority of applications a seamless process. Modbus/TCP, Modbus/RTU and OPC supported, SCADA application can monitor status of Ethernet port with Modbus or OPC protocol.

MSM-506/MSM-508 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

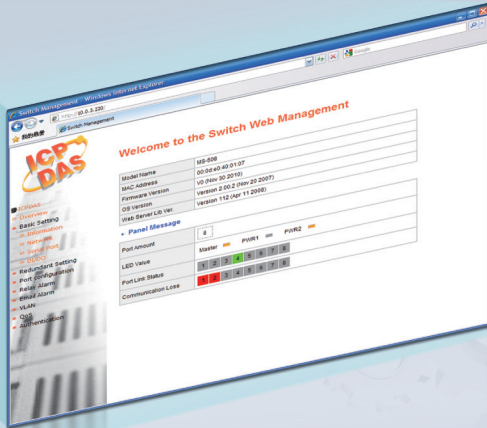
| Models | MSM-508 | MSM-506 |
|--|---|--|
| Technology | | |
| Standards | IEEE 802.3, 802.3u and 802.3x | |
| Processing Type | Store & forward, wire speed switching | |
| MAC Addresses | 2048 | |
| Memory Bandwidth | 3.2 Gbps | |
| Frame Buffer Memory | 1 Mbit | |
| Flow Control | IEEE 802.3x flow control, back pressure flow control | |
| Protocol | VLAN, QoS, Port Trunk, SMTP, TELNET | |
| Interface | | |
| RJ-45 Ports | 8-port 10/100 Base-TX auto negotiation speed, F/H duplex mode, and auto MDI/MDI-X connection | 6-port 10/100 Base-TX auto negotiation speed, F/H duplex mode, and auto MDI/MDI-X connection |
| LED Indicators | Power, 10/100M, Link/Act, Master | |
| Ethernet Isolation | 1500 V _{rms} 1 minute | |
| 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 | |
| Digital Input/Output | | |
| Digital Input | 3-channel, Wet Contact, L: +11 V _{dc} Max., H: +19 V _{dc} ~ +30 V _{dc} | – |
| Digital Output | 3-channel, Open Collector, Sink/NPN, 30V/100 mA Max. | – |
| Power | | |
| Input Voltage Range | +12 V _{dc} ~ +48 V _{dc} Redundant Dual Inputs (Non-isolated) | |
| Power Consumption | 0.25 A @ 24 V _{dc} | 0.2 A @ 24 V _{dc} |
| Protection | Power reverse polarity protection | |
| Frame Ground for EMS Protection | Yes | |
| Connector | 20-Pin Removable Terminal Block | 6-Pin Removable Terminal Block |
| Mechanical | | |
| Casing | Metal | |
| Environmental Rating | IP30 Protection | |
| Dimensions (W x L x H) | 47 mm x 128 mm x 175 mm | 25 mm x 119 mm x 168 mm |
| Installation | DIN-Rail Mounting or Wall mounting | DIN-Rail Mounting |
| Environmental | | |
| Operating Temperature | -40 °C ~ +75 °C | |
| Storage Temperature | -40 °C ~ +85 °C | |
| Ambient Relative Humidity | 10% ~ 90% RH, non-condensing | |
| Accessories | | |
| Included Cable | CA-090510 x 1 | |

Comparison Table of MSM-508 and MSM-506

| Mode Name | MSM-508 | MSM-506 |
|-------------------------------|------------------------------------|--------------------------------|
| RJ-45 Ports | 8-port 10/100 Base-TX | 6-port 10/100 Base-TX |
| Digital Input | 3-channel, Wet Contact | – |
| Digital Output | 3-channel, Open Collector | – |
| Power Consumption | 0.25 A @ 24 V _{dc} | 0.2 A @ 24 V _{dc} |
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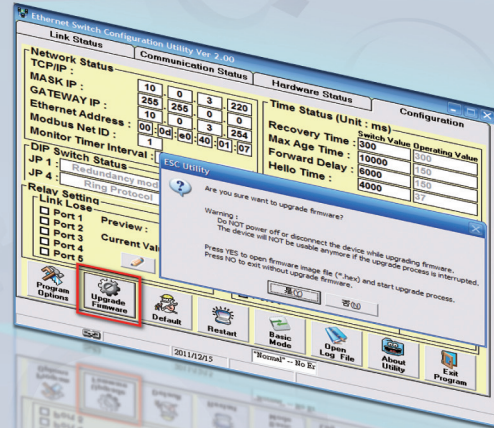
Web Configuration

Built-in web-based management, providing a more convenient UI for the user.



Firmware Upgrade

Use ESC Utility to upgrade firmware.

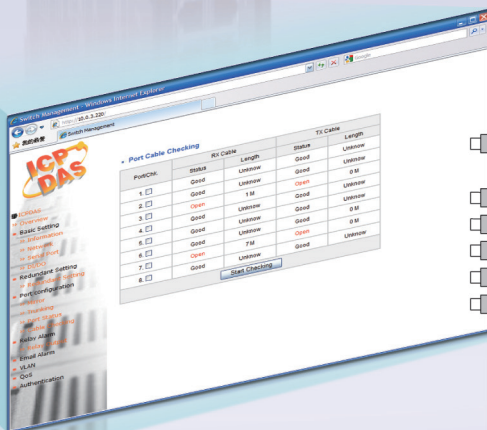
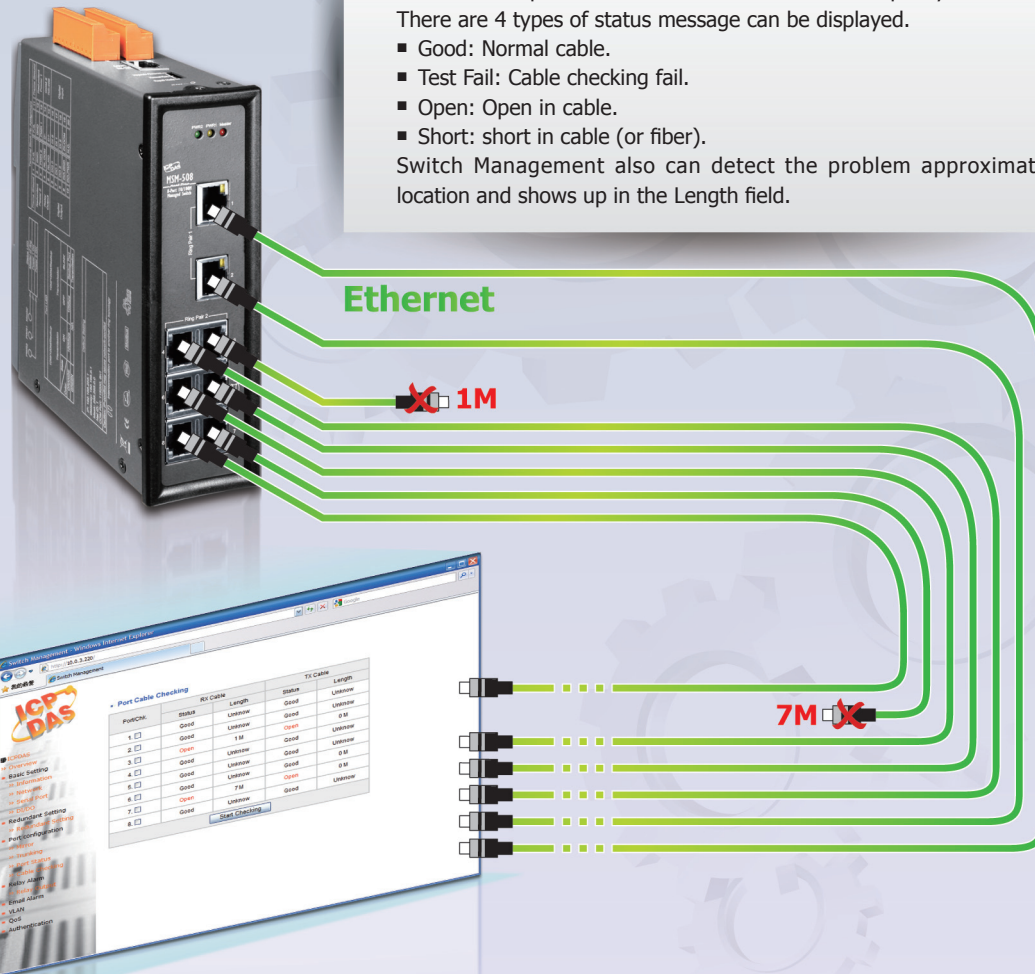


Cable Test

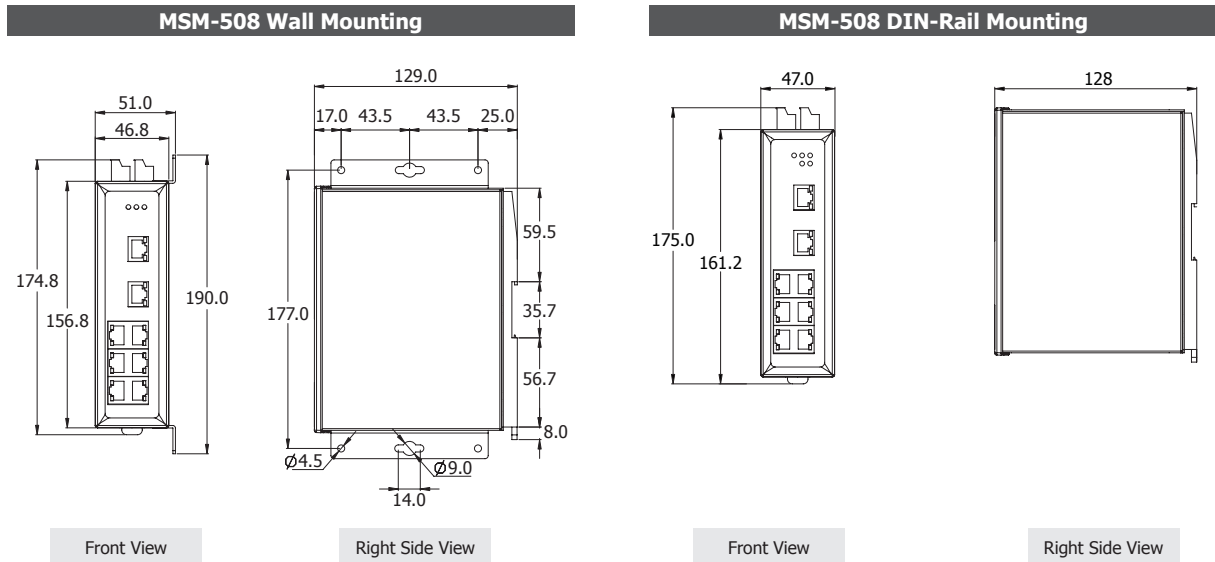
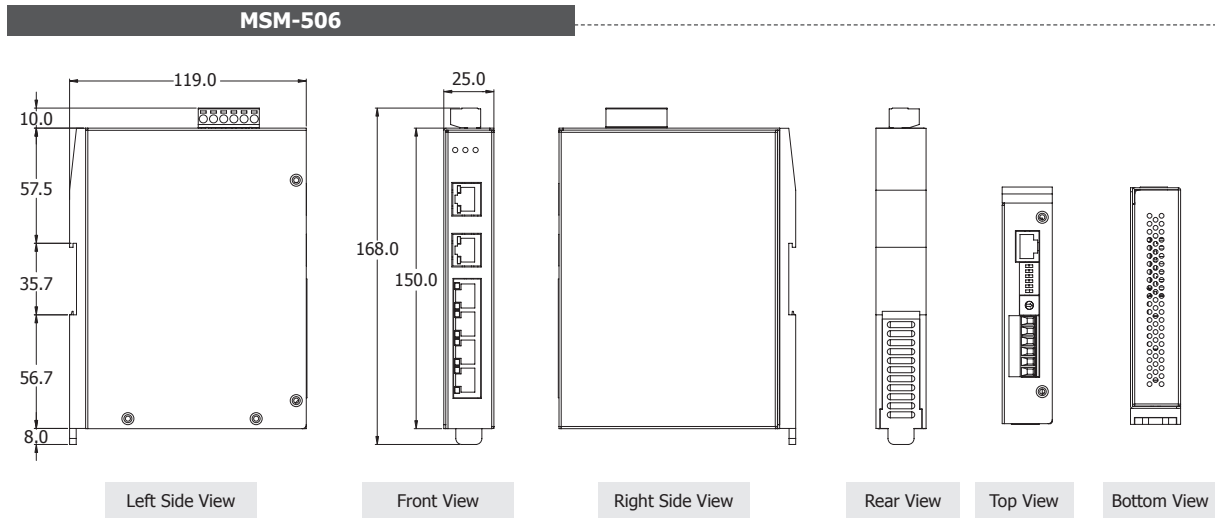
This function provides a useful tool to detect the quality of cables. There are 4 types of status message can be displayed.

- Good: Normal cable.
- Test Fail: Cable checking fail.
- Open: Open in cable.
- Short: short in cable (or fiber).

Switch Management also can detect the problem approximate location and shows up in the Length field.



Dimensions (Units: mm)



Ordering Information

| | |
|------------|--|
| MSM-506 CR | 6-port Layer 2 Managed Switch with metal casing (RoHS) |
| MSM-508 CR | 8-port Layer 2 Managed Switch with metal casing (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 |