

# NS-206F Series/NSM-206F Series

4-port 10/100 Mbps Ethernet with dual fiber port Switch

NS-206FC/FCS



NS-206FT



NSM-206FC/FCS



NSM-206FT



## Highlight Information ▶▶▶



For NSM-206F series



For NS-206F series



## Features ▶▶▶

- Provides 2 x 100-FX fiber port plus 4 x Ethernet ports
- Each port supports both 10/100 Mbps speed auto negotiation
- Full duplex IEEE 802.3x and half duplex backpressure flow control
- Automatic MDI/MDI-X crossover for plug-and-play
- Store-and-forward architecture
- Supports operating temperatures from 0 ~ +70 °C

## Introduction

The NS-206F/NSM-206F is a 4-port unmanaged Ethernet with dual fiber port switch. Using fiber optics, you can prevent noise from interfering with your system and supports high-speed (100 Mbps) and high-distance (up to 15 km) transmissions.

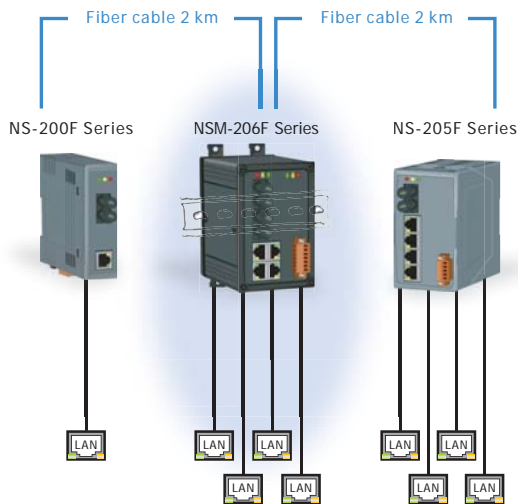
The NS-206F/NSM-206F provides a wide 10 to 30 V<sub>DC</sub> power range to fit all the common power standards found in industrial automation, without external power converters. The wide power input lowers installation and maintenance costs.

## Specifications

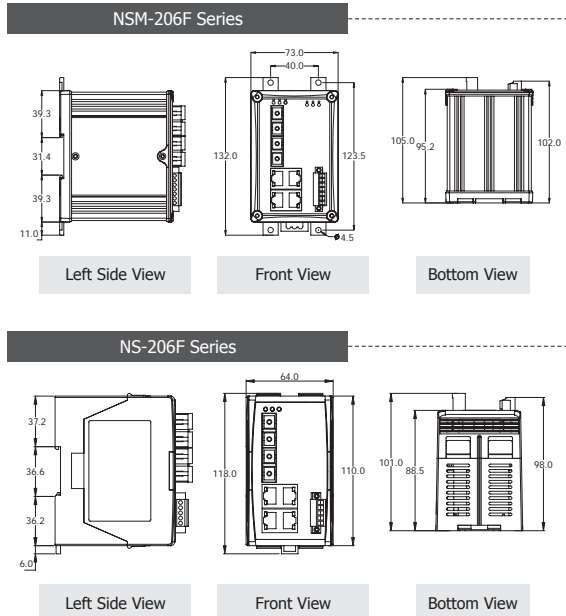
| Models                                    | NS-206F Series  | NSM-206F Series  |
|---|---|--|
| Technology                                |   |  |
| Standards                                 | IEEE 802.3, 802.3u, 802.3x  |  |
| Processing Type                           | Store & forward; wire speed switching   |  |
| MAC Addresses                             | 1024  |  |
| Memory Bandwidth                          | 1.6 Gbps  |  |
| Frame Buffer Memory                       | 256 Kbit  |  |
| Flow Control                              | IEEE 802.3x flow control, back pressure flow control                                    |  |
| Ethernet Interface                        |   |  |
| RJ-45 Ports                               | 10/100 Base-T(X) auto negotiation speed, F/H duplex mode, and auto MDI/MDI-X connection |  |
| LED Indicators                            | Power, Link/Act, 10/100M  |  |
| Ethernet Isolation                        | 1500 V <sub>rms</sub> 1 minute  |  |
| Fiber Interface (100 Base-FX; SC/ST type) |   |  |
| Multi-Mode                                | NS-206FT/NS-206FC<br>NSM-206FT/NSM-206FC  | Multi mode fiber cables: 50/125, 62.5/125 or 100/140 μm<br>Distance: 2 km, (62.5/125 μm recommended) for full duplex<br>Wavelength: 1300 or 1310nm<br>Min. TX Output: -20 dBm<br>Max. TX Output: -14 dBm<br>Max. RX Sensitivity: -34 dBm     |
| Single-Mode                               | NS-206FCS/NSM-206FCS  | Single-mode fiber cables: 8.3/125, 8.7/125, 9/125 or 10/125 μm<br>Distance: 15 km, (9/125 μm recommended) for full duplex<br>Wavelength: 1300 or 1310nm<br>Min. TX Output: -15 dBm<br>Max. TX Output: -8 dBm<br>Max. RX Sensitivity: -36 dBm |

| Models                    | NS-206F Series                              | NSM-206F Series  |
|---------------------------|---|--|
| <b>Power Input</b>        |   |  |
| Input Voltage Range       | +10 ~ +30 V <sub>DC</sub> (Redundant input) | +10 ~ +30 V <sub>DC</sub> (Redundant input)<br>One relay output with current carrying capacity of 1 A @ 30 V <sub>DC</sub> |
| Power Consumption         | 0.24 A @ 24 V <sub>DC</sub>                 |  |
| Protection                | Power reverse polarity protection           |  |
| +/-4 kV ESD Protection    | Yes   |  |
| Connector                 | 5-Pin Removable Terminal Block              | 7-Pin Removable Terminal Block   |
| <b>Mechanical</b>         |   |  |
| Casing                    | Plastic (Flammability UL 94V-0)             | Metal (IP20 Protection)  |
| Dimensions (W x L x H)    | 64 mm x 101 mm x 118 mm                     | 73 mm x 105 mm x 132 mm  |
| Installation              | DIN-Rail Mounting                           | DIN-Rail Mounting or Wall Mounting   |
| <b>Environmental</b>      |   |  |
| Operating Temperature     | 0 °C ~ +70 °C                               |  |
| Storage Temperature       | -20 °C ~ +85 °C                             |  |
| Ambient Relative Humidity | 10% ~ 90% RH, non-condensing                |  |

**Fiber Daisy Chain Configuration**

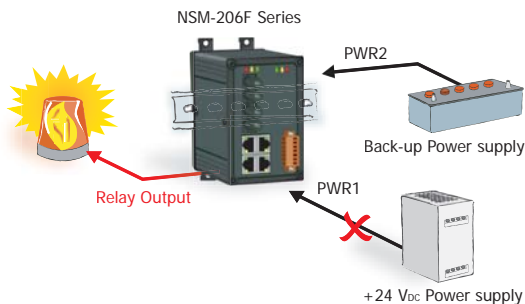


**Dimensions (Units: mm)**



**Redundant Power Input for NSM-206F series**

Both power inputs can be connected simultaneously to live DC power sources. If one power source fails, the other live source acts as a backup, and automatically supplies all of NSM-206F series power needs.



**Ordering Information**

|               |  |
|---------------|--|
| NS-206FT CR   | Multi-mode, ST Connector, 4-port 10/100 Mbps with dual fiber port Switch (RoHS)                    |
| NS-206FC CR   | Multi-mode, SC Connector, 4-port 10/100 Mbps with dual fiber port Switch (RoHS)                    |
| NS-206FCS CR  | Single-mode 15 km, SC Connector, 4-port 10/100 Mbps with dual fiber port Switch (RoHS)             |
| NSM-206FT CR  | Multi-mode, ST Connector, 4-port 10/100 Mbps with dual fiber port Switch; metal case (RoHS)        |
| NSM-206FC CR  | Multi-mode, SC Connector, 4-port 10/100 Mbps with dual fiber port Switch; metal case (RoHS)        |
| NSM-206FCS CR | Single-mode 15 km, SC Connector, 4-port 10/100 Mbps with dual fiber port Switch; metal case (RoHS) |

**Accessories**

|           |  |
|-----------|--|
| MDR-60-24 | 24 V/2.5 A, 60 W Power Supply with DIN-Rail Mounting |
| MDR-20-24 | 24 V/1 A, 24 W Power Supply with DIN-Rail Mounting   |
| DIN-KA52F | 24 V/1.04 A, 25 W Power Supply                       |