



NS-200WDM Series



Industrial Single-Strand 10/100 Base-TX to 100 Base-FX Media Converter

Highlight Information ▶▶▶



















NS-200WDM-B



Introduction

Using the fiber optic medium for ethernet applications has become more popular due to fiber optic's excellent physical features, especially for long distance networks. However, fiber optic cable is very expensive, so if we can apply a solution that uses only 1 cable instead of 2, the infrastructure cost can be cut in half. The NS-200WDM Series provides a solution that reduces your expense by 50%!

The NS-200WDM Series of Single-Strand Fiber Converters supports Wavelength Division Multiplexing (WDM) technology that allows two independent data communication channels to transmit and receive over one standard, single mode, fiber optic line. This not only doubles your existing bandwidth, but also effectively reduces the cost of creating a new fiber optic infrastructure.

50% Cost Saving for Fiber Optic Infrastructures

With a pair of NS-200WDM series products (NS-200WDM-A and NS-200WDM-B), you can double the utilization of your existing, costly fiber optic cable, and save 50% of the cost of a newly installed fiber optic application.

It contains "soft start" function with overload protection, high-low voltage protection.

The width of the NS-200WDM is just 33 mm, so it can be used where space is important.

Features

- Automatic MDI/MDI-X crossover for plug-and-play
- Supports both 10/100 Mbps speed auto negotiation
- Store-and-forward architecture
- Full duplex IEEE 802.3x and half duplex backpressure flow control
- 1.4 Gbps high performance memory bandwidth
- Integrated look-up engine with dedicated 1024 unicast MAC addresses
- Supports +12 V_{DC} ~ +48 V_{DC}
- Reverse Polarity Protection
- Supports operating temperatures from 0 °C ~ +70 °C
- DIN-Rail



Specifications

Technology		
Standards	IEEE 802.3, 802.3u, 802.3x	
Processing Type	Store & forward, wire speed switching	
MAC Addresses	1024	
Memory Bandwidth	1.4 Gbps	
Frame Buffer Memory	256 Kbit	
Flow Control	IEEE 802.3x flow control, back pressure flow control	
Interface		
RJ-45 Port	10/100 Base-TX auto negotiation speed, F/H duplex mode, and auto MDI/MDI-X connection	
Fiber Port	100 Base-FX (Single Mode; SC Connector)	
LED Indicators	10/100M, Link/Act, Full duplex/Half duplex (Fiber Port)	
Ethernet Isolation	1500 V _{rms} 1 minute	
Frame Ground for EMS Protection	Yes	
	Single Mode Fiber Cables: 8.3/125, 8.7/125, 9/125 or 10/125 μm	
	Distance: 15 km, (9/125 μm recommended) for full duplex	
	Wavelength:	
Single Mode	TX: 1310, RX: 1550 nm for NS-200WDM-A	
	TX: 1550, RX: 1310 nm for NS-200WDM-B	
	Min. TX Output: -14 dBm	
	Max. TX Output: -8 dBm	
	RX Sensitivity: -31 dBm	
Ethernet Transmission	Ethernet: 2-pair UTP/STP Cat.3, 4, 5, EIA/TIA-568 100 Ω	
Distance	Fast Ethernet: 2-pair UTP/STP Cat. 5, EIA/TIA-568 100 Ω	
Power		
Input Voltage Range	+12 V _{DC} ~ +48 V _{DC} (Non-isolation)	
Power Consumption	0.12 A @ 24 V _{DC} , +/-5% arrowed with 100M Full duplex	
LED Indicator	Yes	
Protection	Power reverse polarity protection	
Frame Ground for EMS Protection	Yes	
Connection	3-Pin Removable Terminal Block	
Mechanical		
Casing	Plastic	
Flammability	UL 94V-0	
Dimensions (W x L x H)	33 mm x 85 mm x 107 mm	
Installation	DIN-Rail	
Environmental		
Operating Temperature	0 °C ~ +70 °C	
Storage Temperature	-20 °C ~ +85 °C	
Storage remperature		





Applications

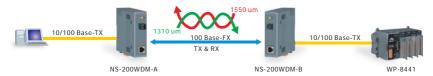
General Media Converter Solution

A general media converter requires a pair of fiber optic cables for data transmission and receiving.

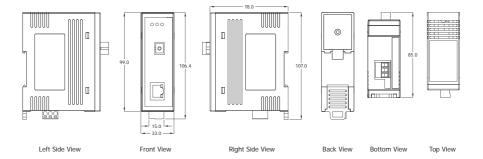


Single-Strand Fiber Converter Solution

Wavelength Division Multiplexing (WDM) supports bi-directional data transmission and receiving using dual wavelengths (1310/1550 nm) over a single strand, of single-mode optical fiber.



Dimensions (Unit: mm)



Ordering Information

NS-200WDM-A CR	10/100 Base-TX to 100 Base-FX Single-Strand Media Converter,
	TX 1310 nm, RX 1550 nm, SC (RoHS)
NS-200WDM-B CR	10/100 Base-TX to 100 Base-FX Single-Strand Media Converter,
	TX 1550 nm, RX 1310 nm, SC (RoHS)
Important Note: You must purchase both NS-200WDM-A and NS-200WDM-B since these products work as a pair.	

Accessories

GPSU06-6	24V/0.25A, 6 W Power Supply
KWM020-1824F	24V/0.75A, 18 W Power Supply
DIN-KA52F	24V/1.04A, 25 W Power Supply with DIN-Rail Mounting