

NS-200WDM Series

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



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 flow control
- MAC addresses 1024
- Supports +12 V_{DC} ~ +48 V_{DC}
- Supports operating temperatures from 0 °C ~ +70 °C
- Slim packaging fits on your DIN-Rail Mounting

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.

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

Specifications

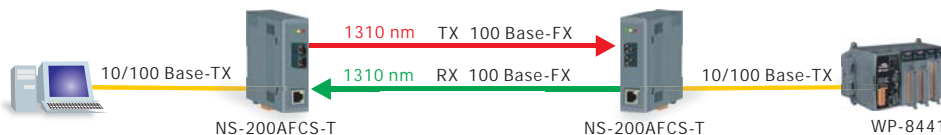
Technology	
Standards	IEEE 802.3, 802.3u, 802.3x
Processing Type	Store & forward, wire speed switching
MAC Addresses	1024
Memory Bandwidth	1.4 Gbps
Frame Buffer Memory	256 Kbit
Flow Control	IEEE 802.3x flow control

Interface		
RJ-45 Port	10/100 Base-TX auto negotiation speed, 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	
Interface		
Single-mode	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	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 Distance	Ethernet	2-pair UTP/STP Cat.3, 4, 5, EIA/TIA-568 100 Ω
	Fast Ethernet	2-pair UTP/STP Cat. 5, EIA/TIA-568 100 Ω
Power		
Input Voltage Range	+12 V _{DC} ~ +48 V _{DC} (Non-isolated)	
Power Consumption	0.12 A @ 24 V _{DC}	
LED Indicator	Yes	
Protection	Power reverse polarity protection	
Frame Ground for EMS Protection	Yes	
Connector	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 Mounting	
Environmental		
Operating Temperature	0 °C ~ +70 °C	
Storage Temperature	-20 °C ~ +85 °C	
Ambient Relative Humidity	10% ~ 90% RH, non-condensing	

Applications

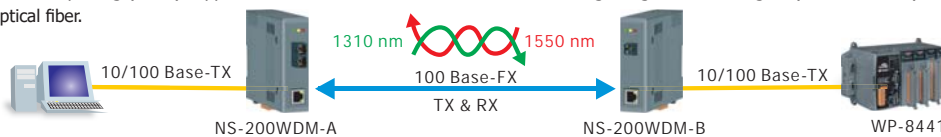
General Media Converter Solution

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

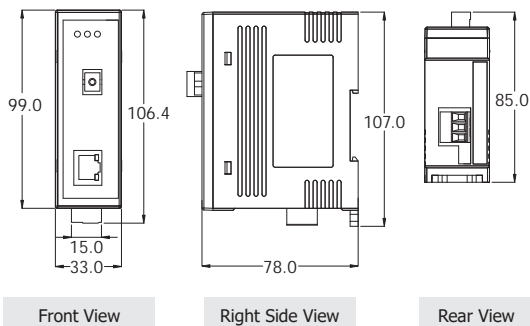


Single-Strand Fiber Converter Solution

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 (Units: 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

GPSU06U-6	24V/0.25A, 6 W Power Supply
DIN-KA52F	24V/1.04A, 25 W Power Supply with DIN-Rail Mounting