

NS-200AFT/AFC/AFCS Series NS-200AFT-T/AFC-T/AFCS-T/ AFCS-40T Series

Industrial 10/100 Base-T(X) to 100 Base-FX Media Converter



Introduction:

The NS-200AF series is an Ethernet (10/100Base-TX) to Fiber Optic (100Base-FX) converter. The Ethernet supports 10/100M auto-negotiation feature and auto MDI/MDI-X function.

The NS-200AF series is available in models that support an operating temperature of 0 to 70 °C, and an extended operating temperature of -30 to 75 °C.

Features:

- Automatic MDI/MDI-X crossover for plug-and-play
- Each port supports both 10/100 Mbps speed auto negotiation
- Store-and-forward
- Full duplex IEEE 802.3x
- Supports +12 ~ +48 VDC voltage
- Supports operating temperatures range 0 °C ~ +70 °C
-30 to 75°C operating temperature range (T models)
- DIN-Rail

Specifications:

Technology	
Standards	IEEE802.3, 802.3u, 802.3x
Processing Type	Store & forward; wire speed switching
MAC Addresses	1024
Memory Bandwidth	1.4 Gbps
Interface	
RJ-45 Port	10/100BaseT(X) auto negotiation speed, Full duplex mode, and auto MDI/MDI-X connection
Fiber Port	100 Base-FX (SC/ST connectors)
LED Indicators	10/100M, Link/Act, Full duplex for Fiber Port
Ethernet Isolation	1500 Vrms 1 minute
Frame Ground for EMS Protection	Yes
Multi Mode (NS-200AFT, NS-200AFT-T, NS-200AFC, NS-200AFC-T)	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 1310nm
	Min. TX Output: -20 dBm
Single Mode (NS-200AFCS, NS-200AFCS-T, NS-200AFCS-40T)	Max. TX Output: -14 dBm
	RX Sensitivity: -34 to -31 dBm
	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: 1300 or 1310nm
	Min. TX Output: - 15 dBm
	Max. TX Output: -8 dBm

	RX Sensitivity: -36 to -31 dBm
Ethernet Transmission distance	Ethernet: 2-pair UTP/STP Cat.3,4,5, EIA/TIA-568 100-ohm
	Fast Ethernet: 2-pair UTP/STP Cat. 5, EIA/TIA-568 100-ohm
Power	
Input Voltage Range	+12 ~ +48VDC (Non-isolation)
Power consumption	0.12A@24VDC, +/- 5% arrowed with 100M Full duplex
LED Indicator	Yes
Protection	Power reverse polarity protection
Frame Ground for EMS Protection	Yes
Case	
Mechanical	Plastic (Flammability UL 94V-0)
Dimensions (W x H x D)	33mm x 107mm x 85mm
Installation	DIN-Rail
Environmental	
Operating Temperature	0°C ~ +70°C(-30°C ~ +75°C T models)
Storage Temperature	-30 ~ +85°C
Ambient Relative Humidity	10% ~ 90% HR, non-condensing

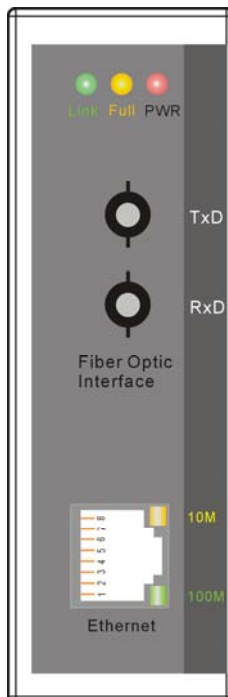
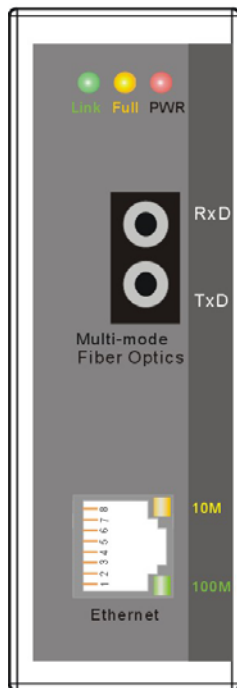
LED functions:

Standard RJ45 female connectors are provided. A standard RJ45 plug cable is necessary to connect your device to the unit since switch that supports auto crossover. Figure1 shows the LED indicator functions. The module includes an internal.

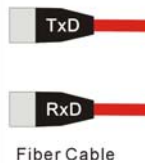
Figure1:

NS-200AFC/NS-200AFC-T

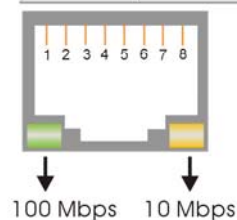
NS-200AFT/NS-200AFT-T



TxD(NS-200FT):Receive function, please connec to TxD cable.
RxD(NS-200FT):Transmit function, please connec to RxD cable.



Function	LED Color	Description
Power	Red	Power is On
	Off	Power is Off
Fiber Optic	Yellow_On	Full Duplex Mode
	Yellow_Off	Half Duplex Mode
	Green_On	Link/Act
	Green_Off	Not Networking
Ethernet	Yellow	Link to 10 Mbps
	Green	Link to 100 Mbps
	Off	Not Networking



Pin Function for Terminal Block:

External power supply is connected using the removable terminal block:

+Vs : Power input (+12 ~ +48 VDC) and should be connected to the power supply (+)

GND : Ground and should be connected to the power supply (-)

F.G. : F.G. stands for Frame Ground (protective ground). It is optional. If you use this pin, it can reduce EMI radiation; improve EMI performance and ESD protection.