NS-200AFT-T/AFC-T/AFCS-T/ AFCS-60T

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

Introduction:

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

NS-200A can work normally from -30 ~ 75°C and accepts a wide voltage range from +12 ~ 48 VDC.

Features:

- Automatic MDI/MDI-X crossover for plug-and-play
- 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 -30 ~ 75°C
- 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-T, 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
	Max. TX Output: -14 dBm
	RX Sensitivity: -32 dBm
Single Mode (NS-200AFCS-T, NS-200AFCS-60T)	Single-mode fiber cables: 9/125µm
	Distance: 30 km for NS-200AFCS-T Distance: 60 km for NS-200AFCS-60T
	Wavelength: 1300 ~ 1310nm
	Min. TX Output: - 15 dBm for NS-200AFCS-T Min. TX Output: - 5 dBm for NS-200AFCS-60T
	Max. TX Output: -8 dBm for NS-200AFCS-T

	Max. TX Output: 0 dBm for NS-200AFCS-60T
	RX Sensitivity: -34 dBm for NS-200AFCS-T
	RX Sensitivity: -35 dBm for NS-200AFCS-60T
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 ~ +48 VDC (Non-isolation)
Power consumption	0.12A@24 VDC
LED Indicator	Yes
Protection	Power reverse polarity protection
Frame Ground for EMS Protection	Yes
Case	
Mechanical	Plastic (Flammability UL 94V-0)
Dimensions (W x L x H)	33mm x 85mm x 107mm
Installation	DIN-Rail
Environmental	
Operating Temperature	-30°C ~ +75°C
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-T/AFCS-T/
 AFCS-60T   **NS-200AFT-T**
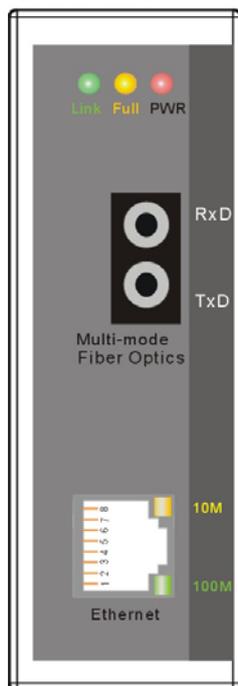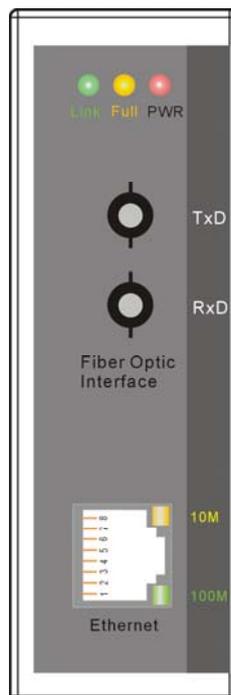
TxD(NS-200FT):Receive function, please connec to TxD cable.
RxD(NS-200FT):Transmit function, please connec to RxD cable.

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
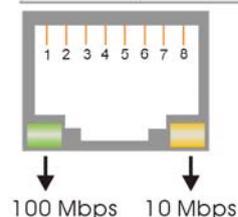
Pin Function for Terminal Block:

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.