



Making Data Acquisition Easy

CAGE/NCAGE CODE: 3FNFO

NS-205

5-Port Industrial 10/100 Mbps Ethernet Switch Quick Start Guide

Product Website:

http://www.icpdas-usa.com/ns_205_ethernet_switch.html

1. Introduction

The NS-205 has 5 Ethernet Switching ports that support 10/100Base-T(X), with a 10/100M auto-negotiation feature and auto MDI/MDI-X function. It can connect 5 workstations and automatically switches the transmission speed (10 Mbps or 100 Mbps) for corresponding connections. The flow control mechanism is also negotiated. LEDs embedded in RJ-45 jacks make for easy monitoring. Port connectors are shielded RJ-45. A power source for +10 ~ +30VDC is required.



Figure 1-1 NS-205



2. LED functions:

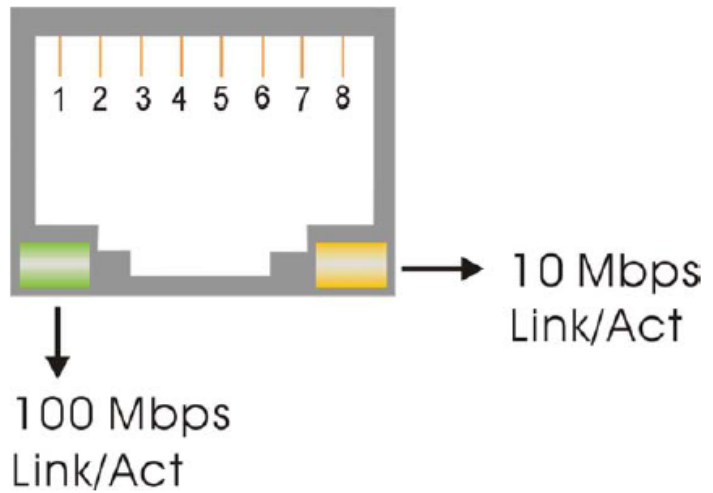
Standard RJ45 female connectors are provided. A standard RJ45 plug cable is all that is necessary to connect your device to the unit since switch that supports auto crossover. Table 1 shows the LED indicator functions. The module includes an internal.

Table 1

LED	Color	Description
Power	Red	Power is On
	Off	Power is Off
10/100M (Port 1)	Yellow	Link to 10 Mbps
	Green	Link to 100 Mbps
	Off	Not Networking
10/100M (Port 2)	Yellow	Link to 10 Mbps
	Green	Link to 100 Mbps
	Off	Not Networking
10/100M (Port 3)	Yellow	Link to 10 Mbps
	Green	Link to 100 Mbps
	Off	Not Networking
10/100M (Port 4)	Yellow	Link to 10 Mbps
	Green	Link to 100 Mbps
	Off	Not Networking
10/100M (Port 5)	Yellow	Link to 10 Mbps
	Green	Link to 100 Mbps
	Off	Not Networking

Pin-Out:

Pin#	Signal Name	Function
1	TD+	Transmit Data
2	TD-	Transmit Data
3	RD+	Receive Data
4	NC	No Connection
5	NC	No Connection
6	RD-	Receive Data
7	NC	No Connection
8	NC	No Connection





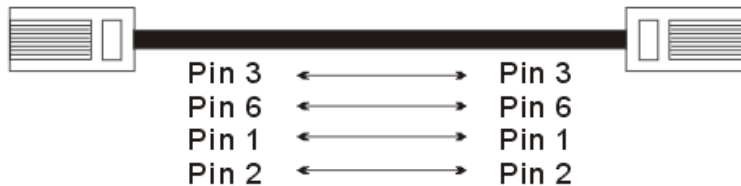
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3. Ethernet Wiring:

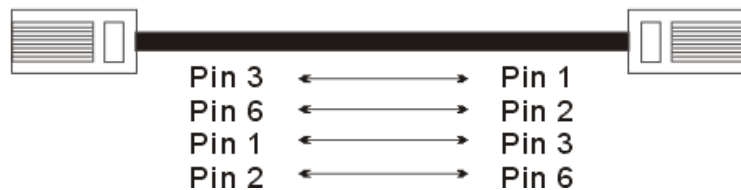
When making a connection to another device using straight-through UTP cable, make sure

the MDI-X to MDI connection rule is followed. The following figure illustrates the pin assignments of a straight-through UTP and a crossover UTP cable:

RJ-45 to RJ-45 Ethernet Wiring - Straight Type (Host <--> Hub)



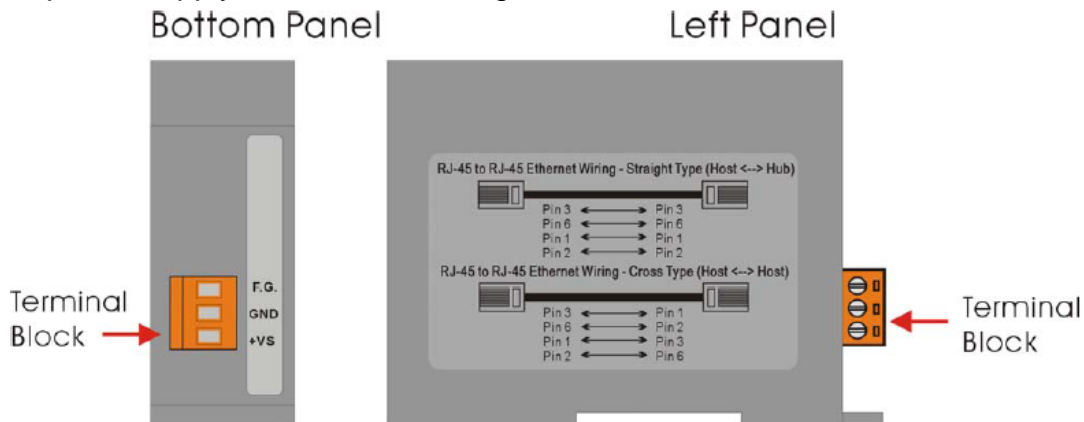
RJ-45 to RJ-45 Ethernet Wiring - Cross Type (Host <--> Host)



4. Checking Power:

Since the NS-205 consumes 2.4W, ensure that your power supply is able to meet this demand. The Input voltage range is +10~+30VDC.

External power supply is connected using the removable terminal block as shown below:



Pin Function For Terminal Block:

External power supply is connected using the removable terminal block:

+Vs : Power input (+10 ~ +30V) 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.