

The MP920 218IF module comes with a standard AUI (Attachment Unit Interface) D-sub (DB-15) socket connector with slide latch. This AUI is provided to allow the user to select the physical connection type. To interface this with standard type physical connections such as 10Base-T (RJ-45) or 10Base-5 (Co-axial), a Transceiver Module will be required.

Cable Diagram:

The 218IF Ethernet communications module is connected with the network via an Ethernet twisted pair transceiver.

The table below shows the pinout of the 218IF Ethernet connector:

Pin Number	Signal Name	Remarks
1	GND	Shield ground
2	CI+	Collision detection (+)
3	DO+	Send data (+)
4	GND	Shield ground
5	DI+	Receive data (+)
6	PWRGND	12 V power supply
7	N.C.	Not Connected
8	GND	Shield ground
9	CI-	Collision detection (-)
10	DO-	Send data (-)
11	GND	Shield ground
12	DI-	Receive data (-)
13	+12 V	12 V power supply
14	GND	Shield ground
15	N.C.	Not Connected

Connection using RJ45 (RJ-45) 10Base-T:

Following are AUI transceiver modules that may be used to comply with IEEE 802.3 transceiver specifications and 10Mbps Ethernet CSMA/CD operation to provide a connection interface to 10Base-T Ethernet Unshielded Twisted-Pair (UTP) cable:

BlackBox: 10BASE-T microTransceiver LD; Model #LE2110A-R2; Phone 724-746-5500

Transition Networks: Ethernet 10Base-T Transceiver; Model # E-TBT-MC02;

Focus Networks: 10Base-T RJ45 Ethernet Transceiver Module; Model 065-2160; (www.signamax.com, 800-446-2377)

Standard patch cables can be used, following is a wiring diagram. Use straight-through when connecting to a hub or switch, use a cross-over cable when connecting two devices to each other.

Belkin: Category 5e straight through patch cable, 4 pair 24 awg; Model # R7J304

NetGear: Dual speed 8-port hub; Model #DS108

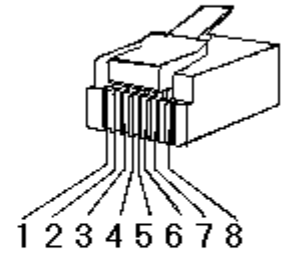
Patch Cable (Straight Through)

TD +	1	OR/WHT	OR/WHT	1	TD +
TD -	2	OR	OR	2	TD -
RD +	3	GRN/WHT	GRN/WHT	3	RD +
	4	BLU	BLU	4	
	5	BLU/WHT	BLU/WHT	5	
RD -	6	GRN	GRN	6	RD -
	7	BRN/WHT	BRN/WHT	7	
	8	BRN	BRN	8	

RJ45

RJ45

10 BaseT



Crossover Cable

TD +	1	OR/WHT	GRN/WHT	1	TD +
TD -	2	OR	GRN	2	TD -
RD +	3	GRN/WHT	OR/WHT	3	RD +
	4	BLU	BLU	4	
	5	BLU/WHT	BLU/WHT	5	
RD -	6	GRN	OR	6	RD -
	7	BRN/WHT	BRN/WHT	7	
	8	BRN	BRN	8	

RJ45

RJ45

8-pin RJ45

Connection using 10Base5 Co-axial:

10Base5

Device Name	Model	Specifications	Manufacturer
AUI Transceiver	DAISET-1581B	Standard cable lengths: 3, 5, 10, 15 m	Mitsubishi Cable Industries, LTD.
Transceiver	ET10071 ET10081	N-tap Vampire tap	Mitsubishi Cable Industries, LTD.
Terminating Resistance	EA10NJT	50 Ω	Mitsubishi Cable Industries, LTD.
Coaxial Cable	AF-ZE-50-4	N-type with plug	Mitsubishi Cable Industries, LTD.

Clamp Filter

To improve the noise resistance, mount three clamp filters on the Ethernet cable. Order suitable clamp filters, according to the type (diameter) of Ethernet cable to be used.

Device Name	Model	Specifications	Maker
Clamp Filter	ZCAT-3035-1330	Internal diameter: 13 mm, 63 g	TDK Corporation
