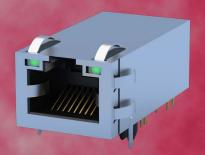
# ADAME ETECH







INTEGRATED MAGNETICS JACKS



Adam Tech's High Speed Integrated Magnetics Jacks provide fast and reliable solutions to increasing bandwidth requirements. These RJ45s are offered in 1G, 2.5G, 5G, and 10G Base-T speeds, equipping them to be supported by Cat 5e, Cat 6, and Cat 6a ethernet cables. The series includes a variety of options including LED lights, shielding, and magnetics. Adam Tech is committed to accommodating the advancing technology of signal transmission.



- Internet
- Computer networking
- Telecommunications











## **FEATURES AND BENEFITS:**

- 8P8C
- 1 and 2 ports
- 1G, 2.5G, 5G, and 10G Base-T
- Cat 5e, Cat 6, and Cat 6a
- Shielded
- Integrated magnetics
- LEDs
- UL certified









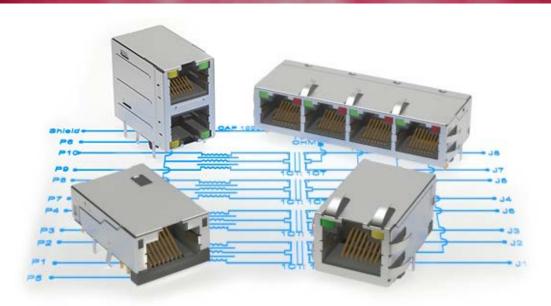












Adam Tech MTJ series RJ-45 connectors with integrated magnetics are designed to support Base 10, 100 and 1000-T applications such as hubs, routers, ADSL modems, and ATM transmission equipment. The integrated magnetics allows the design engineer to save PC board real-estate and lower the total part count per system. This series meets all applicable specifications for CAT 5, 5e, 6 and IEEE 802.3. The USB model meets all applicable USB 2.0 specifications. All configurations are available with optional LED's.

# **FEATURES & SPECIFICATIONS**

### **FEATURES:**

Single, stacked and ganged configurations available All products have a full metal shield to guard against electromagnetic interference. Hi-Temp option availableAll products are fully lead free and RoHS compliant

## **MATING PLUGS:**

Adam Tech modular telephone plugs and all industry standard telephone plugs.

## **PACKAGING:**

Anti-ESD plastic trays or tubes

#### **SAFETY AGENCY APPROVALS:**

UL Recognized File no. E224049

#### SPECIFICATIONS:

#### **Material:**

Insulator: PBT, glass filled, rated UL94V-0

Insulator Color: Black

Contacts: Phosphor Bronze or Brass Shield: Copper Alloy, Nickel or Tin plated

## **Contact Plating:**

Gold over Nickel underplate on contact area, Tin over Copper underplate on solder tails.

### **Electrical:**

Operating Voltage: 150V AC Current Rating: 1.5 Amps Max. Contact Resistance: 20 m $\Omega$  Max. Insulation Resistance: 500 M $\Omega$  Min.

Dielectric Withstanding Voltage: 1500V AC for 1 Minute

DC resistance: 1.2 Ohms Max.

Interwinding capacitance: 35pF @ 1MHz Insertion loss: 100KHz to 80MHz = -1.1dB Min. Return loss: 1MHz to 30MHz = -18dB Min.

30MHZ to 80MHz = -12dB Min.

Rise time: 30nS Max.

Cross talk: 1MHz to 100MHz = 40dB TYP.

Common to Common mode Attenuation: 35dB TYP.

#### **MECHANICAL:**

Insertion force: 8 Contacts: 22.5N

10 Contacts: 24.5N

#### **TEMPERATURE RATING:**

Operation Temperature: -40°C ~ +85°C



















MAGNETICS TELEPHONE JACK PART NUMBER CONFIGURATION										
MTJG ·	8 -	- 8 -	· C	- X -	1 1	- FSD -	· LD	- M5 ·	- PG	
SERIES	HOUSING PLUG SIZE	NO. OF CONTACT POSITIONS FILLED	HOUSING TYPE	PLATING	BODY COLOR	SHIELD PIN LOCATION FSD OR FSP	LED	TRANSFORMER M1 THRU M20	OPTIONS:	
MTJ = Modular Telephone Jack	<b>8</b> or <b>10</b>	<b>8</b> or <b>10</b>	C = Tab Up, Extended Body S = Tab Up, Standard Body T = Tab Down, Short Body	X = Gold Flash 0 = 15 μin gold 1 = 30 μin gold 2 = 50 μin gold	1 = Black	(See drawing on page 41)	LX = Led Color RLX = Led with Resistor	(See page 44-45) Consult Factury for transformer types not shown	Add designator(s) to end of part number <b>PG</b> = Panel ground tabs	

JACKS WITH INTEGRATED MAGNETICS & LEDS PART NUMBER CONFIGURATION										
MTJG-	4 .	- 8 -	- 8 -	· T ·	- X -	· 1 ·	FSD -	· LD	- M5 ·	- PG
SERIES	NO. OF PORTS	HOUSING PLUG SIZE	NO. OF CONTACT POSITIONS FILLED	HOUSING Type	PLATING	BODY COLOR	SHIELD PIN LOCATION FSD THRU FSH	LED	TRANSFORMER M1 THRU M20	OPTIONS:
MTJG = Magnetics Ganged Jack	2 thru 8	<b>8</b> or <b>10</b>	8 or 10	<b>T</b> or <b>J</b>	X = Gold Flash 0 = 15 μin gold 1 = 30 μin gold 2 = 50 μin gold	1 = Black	(See drawing on page 40)	LX = Led Color RLX = Led with Resistor	(See page 44-45) Consult Factury for transformer types not shown	Add designator(s) to end of part number <b>PG</b> = Panel ground tabs



















Adam Tech's High Speed RJ45 Jacks are a complete line of RJ45 connectors designed to support 1GB-10GB performance. They are built to meet Category 5e, 6, or 6a performance according to TIA/EIA 568-C-2. These jacks support all Gigabyte and Ethernet Protocols. Versions include metal shielding for EMI protection with ground peg location options, ground fingers and LED's for link/activity indication and network speed verification. Adam Tech RJ45 jacks are compliant to FCC standards and are UL recognized.

## **FEATURES & SPECIFICATIONS**

## **FEATURES:**

8P8C

1 and 2 ports

Speeds: 1G, 2.5G, 5G, and 10G Base-T Cable compatibility: Cat 5e, Cat 6, and Cat 6a

Shielded .

Integrated magnetics

**LEDs** 

High-temp thermoplastic insulator, UL 94V-0

**UL** certified

#### **SAFETY AGENCY APPROVALS:**

UL Recognized File no. E224049

#### **SPECIFICATIONS:**

#### Material:

Insulator: Thermoplastic

Contacts: Phosphor bronze or copper alloy Shield: Brass, nickel plated; or stainless steel

#### **Contact Plating:**

Round contacts: Gold over nickel underplate overall

Flat contacts: Gold over nickel underplate on contact area, tin

over nickel underplate on solder tails

#### **Electrical:**

Operating voltage range: 125 to 150V A Current rating range: 0.1 to 1.5 Amps Contact resistance: 20 m $\Omega$  max. initial Insulation resistance: 500 M $\Omega$  min.

Dielectric withstanding voltage: 500 to 2250V DC for 1 minute

## **TEMPERATURE RATING:**

Operating temperature range: -40°C to +85°C

















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