

## Adam Tech PoE & PoE+ RJ-45 Jacks with Integrated Magnetics

Designed to support Base 10, 100 and 1000-T applications such as hubs, routers, ADSL modems, and ATM transmission equipment. The integrated magnetics allow 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. All configurations are available with optional LED's.

### Electrical Specifications @ 25°C

Turns Ratio 1CT:1CT +/-3%

Inductance (OCL) Media side

Channel 1/Channel 2

@ 100KHz/100mVrms with 8mA DC BIAS: 350uH Min.

@ 100KHz/100mVrms with 19mA DC BIAS: 120uH Min.

Channel 3/Channel 4

@ 100KHz/100mVrms with 8mA DC BIAS: 350uH Min.

Insertion loss: 0.1MHZ~1MHzt -1.1dB MAX.

1MHZ~65MHZ -0.8dB MAX.

65MHZ~100MHZ -1.2dB MAX.

100MHZ~125MHZ -1.4dB MAX.

### Return loss: Load 100 ohms

0.5MHZ~40MHZ -18dB MIN.

40MHZ~100MHZ -18+20Log(F/80MHz) dB Min.

### CM TO CM REJECTION

1MHZ~100MHZ -30dB MIN

### TO DM REJECTION

1MHZ~100MHZ -35dB MIN

### CROSS TALK

1MHZ~100MHZ -30dB MIN

1MHZ~100MHZ -30dB MIN

### HIPOT (Isolation Voltage):

Input to Output Isolation 2250VDC Min@60 Sec

Balanced DC Line current/ Voltage rating (PSE Pins)

720 mA Maximum @ 57V Continuous



### Material

- Housing: Thermoplastic UL 94V-0
- Contacts: Phosphor bronze plated with 15u"/30u"/50u" min hard gold over 2.45um (100u") nickel
- Solder tail plating: 200-500 microinches 100% matte tin finish
- Shielding: Nickel plated copper alloy
- Insulation Resistance: 500 Megohms min
- Contact Resistance: 30 Milliohms max

### Options

- Port: 2X1/2X2/2X4/2X6/2X8
- Contacts: 8
- Shielding: Shielded with EMI panel ground fingers
- Magnetics: Multiple schematics available
- LED: With or without LEDs

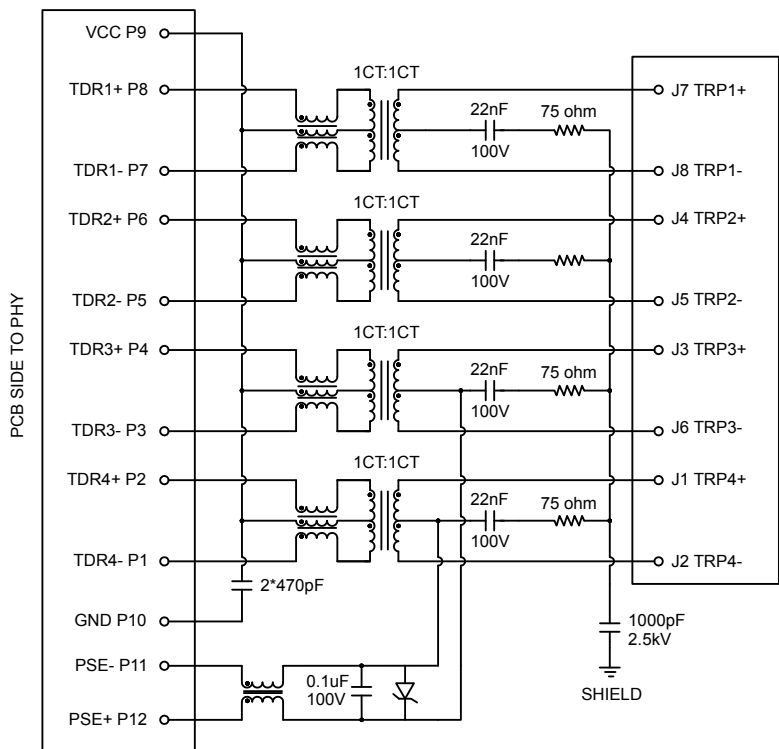
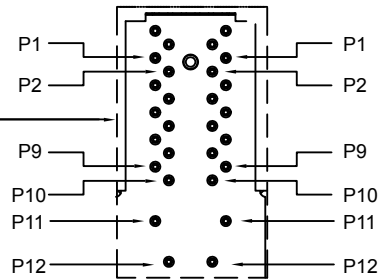
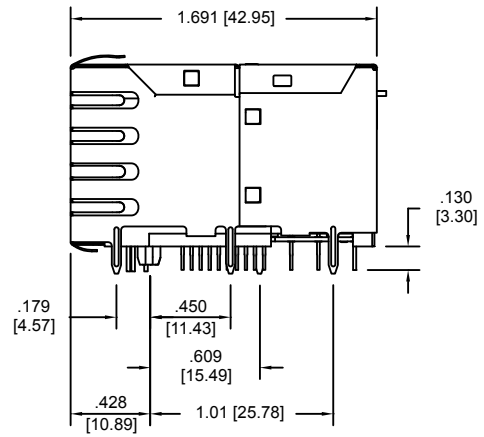
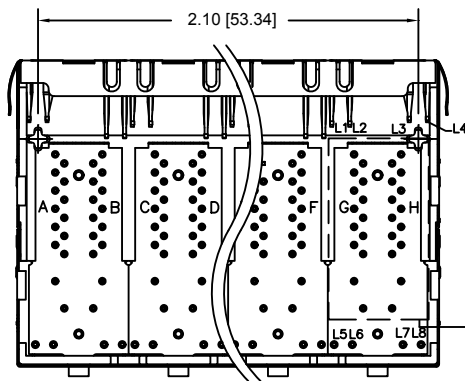
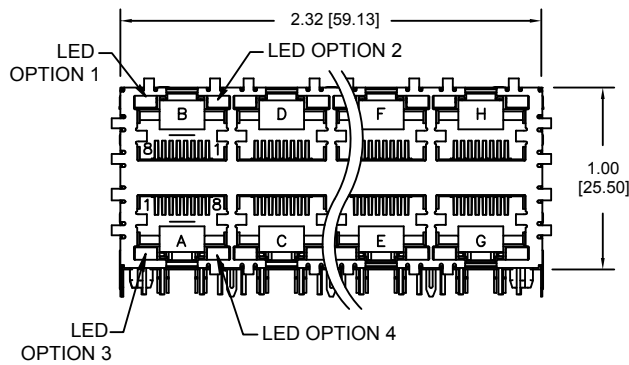
### Features

- Shielded RJ-45 connector with integrated 10/100 or Gigabit Ethernet magnetics
- Power over Ethernet [PoE / PoE+] enabled. Compatible to IEEE 802.3af/IEEE802.3 and all 10/100/1000 Ethernet specifications
- Compatible with a variety of 10/100 Base-T transceiver ICs and Gigabit Ethernet transceiver ICs.
- Integrated design conserves valuable board space
- Minimum interwinding breakdown voltage of 2250 VDC.
- Adaptable, modular design provides higher reliability
- PoE or PoE+ options available
- PoE applications - 350mA max current capability
- PoE+ 720mA max current capability
- Operating temperature: 0°C to +70°C
- Storage temperature: -40°C to +85°C



# ADAM TECH

ADVANCED INTERCONNECT PRODUCTS AND SYSTEMS



MULTIPLE TRANSFORMER CONFIGURATIONS AVAILABLE

CONFIGURATIONS	PART NO.
2 x 1	MTJG-2-88J01-FS-PG-LX-MXXX*
2 x 2	MTJG-4-88J01-FS-PG-LX-MXXX*
2 x 4	MTJG-8-88J01-FS-PG-LX-MXXX*
2 x 6	MTJG-12-88J01-FS-PG-LX-MXXX*
2 x 8	MTJG-16-88J01-FS-PG-LX-MXXX*

\*MULTIPLE TRANSFORMER CONFIGURATIONS AVAILABLE

**Adam Tech • USA**  
909 Rahway Ave | Union, NJ 07083  
Tel: 908.687.5000  
Fax: 908.687.5710  
Email: info@adam-tech.com  
www.adam-tech.com

**Adam Tech • TAIWAN**  
5F-17, No.14, Lane 609,  
Sec. 5, Chongsin Rd.  
New Taipei City | Taiwan (R.O.C.)  
Tel: 886-2 2999 8028  
Fax: 886-2 2999 8062  
Email: sales@adam-tech.com  
www.adam-tech.com.tw

**Adam Tech • CHINA**  
Shenzhen City  
Guangdong Province  
China  
Tel: 886-2 2999 8028  
Fax: 886-2 2999 8062  
factory@adam-tech.com  
www.adam-tech.com.cn

**Adam Tech • EUROPE**  
Yeovil | UK  
www.adam-tech.com  
europe@adam-tech.com