

## POE CONNECTOR SERIES

Xmultiple XPJG, XPJH and XPJF PoE series RJ45 Magnetic connectors with integrated LAN magnetic are designed to save board space and provide a way to increase the accuracy of board assembly. Power of Ethernet (PoE) inserts DC voltage into the unused wires in a standard Ethernet cable and connector pairs 7-8 and 4-5.

The XPRH, XPRG, and XPRF PoE RJ45 Magnetic Jacks integrate magnetic components inside the shielded jack housing to save valuable board space and to reduce discrete component placements. Xmultiple's series of PoE connectors allows IP telephones, wireless LAN Access Points, webcams and other devices to receive power as well as data over existing LAN cabling.

The XPJH, XPRG and XPRF PoE RJ/LED/Magnetic modular jacks are designed as shielded and unshielded jacks. They are provided with thru-hole PC board mount. These high performance category 5 and 5e jacks conform to TIA/EIA-568A requirements.

Optional LEDs integrated into the modular jack reduce space requirements for indicators. LEDs reduce time and much of the labor cost for electronic assembly. With built in LEDs the status of transmit/receive, collisions and line status can be identified by viewing the indicators directly in each port. The LEDs are offered in a variety of color combinations.

The XPRH modular jacks are provided with 1 and 4 ports as well as 2x1, 2x4, 2x6 and 2x8 Stackable connectors. The XPRG and XPRF are provided with 1 and 4 ports. With an industry-standard RJ45 footprint, the modular PoE connectors offer a choice of magnetic components to meet 10/100 Base-T and 1 Gigabit specifications. By integrating customer-specific yoke coils and transformer configurations within the connector, the connectors permit designers to reduce board size or to dedicate more space to essential circuitry.



### PRODUCT FACTS

- PoE provides power as well as data over Ethernet
- 10/100Mbps and 1G IEEE802.3af connectors
- Optional LEDs provided in a variety of color options
- Designed to be compatible with standard wave solder, I/R and vapor phase manufacturing processes.
- Offered in 1 port, 4 port and stackable 2x1, 2x4, 2x6 and 2x8 port configurations
- Unshielded and shielded versions in popular size configurations
- Provides grounding through panel and PC Board, gold plating and solder tails
- Lower labor cost during assembly of PCB
- Meets or exceeds FCC Part 68 rules and regulations with standard PC board footprints. Meet 10/100 and 1 Gigabit specifications.
- Produced under a Quality Management Certified to ISO 9000

# LED MODULAR JACK SPECIFICATIONS

## Electrical

- **Current Rating** - 1.5 amp max. at 25°C
- **Voltage Rating** - 150 VAC max.
- **Dielectric Withstanding Voltage** – 1000 VAC
- **Insulation Resistance** – 500 megohms min.
- **Shielding Effectiveness** - 20dB min., 10 to 200 MHz
- **Attenuation** - @ 100 MHz - .0.4 dB max.
- **Return Loss** - @ 100 MHz - 19 dB min.
- **Common Mode Rejection** - 16 dB at 155 MHz (For Common Mode Choke, Electrical Diagram 023)

## Mechanical

- **Durability** -1000 mating cycles (per IEC 603)
- **Mating/Unmating Forces** - 4.5 lbs. Max
- **Operating Temperature** - -40°C to 70°C

## Material & Finish

- **Housing** - High temperature Nylon, Black, UL 94V-0 rated
- **Contact** - 0.33 [.013] Phosphor bronze, plated 0.00127 [.000050] gold in localized area and 0.00381 [.000150] tin-lead on solder tails, over 0.00127 [.000050] nickel underplate
- **Shield** - 0.25 [.010] copper alloy, tin-lead plated



## ORDERING INFORMATION

**Part Numbers:** XPRH-X-XX-XX-X-XXX

**Part Numbers:** XPRG-X-XX-XX-X-XXX

**Part Numbers:** XPRF-X-XX-XX-X-XXX

**X denotes** – 10/100Mbps and 1G

**XX denotes** – Number of ports 1,4, 2x1,2x4,2x6 & 2x8

**XX denotes** – Number of Contacts & Positions: ( 8 or 8)

**X denotes** – **LED1:** Various Colors or Bi-LED Optional

**LED2:** Various Colors or Bi-LED Optional

**XXX denotes** – **Circuit Type for Integrated Magnetic**

## XMULTIPLE USA

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