

✓ RoHS & CE	✓ UL 94V-0/V-2
✓ Fluke Tested	✓ OEM / ODM

CAT5E RJ45 CONNECTOR SERIES

Cat5e Shielded Two-Piece RJ45 Connector - 8P8C STP Modular Plug with 6-Up 2-Down Staggered Design and Load Bar

Online Product Page:
https://www.hxplug.com/cat5e-shielded-two-piece-rj45-connector-6up-2down-stp/

KEY PRODUCT HIGHLIGHTS

- Innovative Two-Piece System: Includes a dedicated load bar (liner) that ensures precise wire alignment and significantly simplifies the termination process.
- Optimized 6-Up 2-Down Layout: The unique staggered internal geometry (6 pins up, 2 pins down) minimizes Near-End Crosstalk (NEXT) for superior signal clarity.
- Comprehensive EMI Shielding: Encased in a high-quality nickel-plated copper shell to block electromagnetic interference and provide a reliable ground.
- Industrial 50µ" Gold Plating: Features the highest grade of gold plating on phosphor bronze contacts for maximum conductivity and corrosion resistance.
- Gigabit Ethernet Ready: Supports data transfer speeds up to 1000 Mbps and 100MHz bandwidth, meeting all Category 5e TIA/EIA standards.

TECHNICAL SPECIFICATIONS & PARAMETERS

Parameter	Specification / Standard
Product Model	HX-C5E-2P-6U2D
Structure	Two-Piece (Plug Body + Load Bar)
Internal Layout	Staggered 6-Up / 2-Down
Category	Cat5e (Category 5e)
Shielding	STP / FTP (Nickel-Plated Copper)
Gold Plating	50µ" Gold Over Nickel
Wire Gauge Support	24AWG - 26AWG Solid or Stranded
Housing Material	UL 94V-2 High-Impact Polycarbonate
Transmission Rate	1000 Mbps (1 Gbps)
Bandwidth	100 MHz
Durability	≥ 750 Mating Cycles

ENGINEERING OVERVIEW & APPLICATIONS

The Cat5e Shielded Two-Piece RJ45 Connector represents a significant leap forward in modular plug technology. Designed for high-performance Shielded Twisted Pair (STP) cabling, this connector is specifically built to handle the rigorous demands of modern data environments. While standard one-piece connectors can be challenging to align, our two-piece system utilizes a precision-molded load bar to ensure every wire is perfectly seated before the plug is ever crimped.

Crosstalk is the enemy of high-speed data. In traditional flat-row connectors, the proximity of the copper conductors can lead to signal bleeding. Our Cat5e Shielded Two-Piece RJ45 Connector features a specialized 6-Up 2-Down staggered arrangement. By staggering the conductors in two rows, we increase the physical distance between the wires inside the plug. This configuration drastically reduces Near-End Crosstalk (NEXT) and Return Loss, ensuring your network maintains stable Gigabit speeds even in high-density installations.

One of the most common causes of network failure is poor termination. The Cat5e Shielded Two-Piece RJ45 Connector eliminates this variable through its included load bar.

- Accuracy: The load bar allows you to verify the wiring sequence (T568A or T568B) clearly before insertion.
- Performance: It keeps the twists of the cable pairs as close to the contacts as possible, which is essential for meeting Cat5e certification requirements.
- Speed: Installers can work faster with fewer errors, reducing labor costs and material waste.

In industrial settings or data centers filled with power cables, electromagnetic interference (EMI) is a major concern. The Cat5e Shielded Two-Piece RJ45 Connector is wrapped in a robust, nickel-plated copper alloy shell. This shell acts as a Faraday cage, shielding the internal signals from external noise and providing a secure grounding path for the cable's drain wire. When paired with shielded Cat5e cables, it creates a fully protected data link.

Gold Plating Options FU" / 3μ" / 6μ" / 15μ" / 30μ" / 50μ" Custom Gold Plating	**100% Quality Assurance** Fluke Versiv / DSX Tested, Salt-Spray & ≥750–2000 Mating Cycles
OEM / ODM Customization Custom Mold Tooling, Housing Colors, Cable Lengths & Private Label	**Certifications & Compliance** ISO 9001:2015, RoHS, REACH, CE, UL 94V-0 / UL 94V-2 Rated

Need Custom Gold Plating (3μ"–50μ"), Custom Molding, Private Label Packaging, or Bulk Factory Pricing?
WhatsApp / Tel: **+86 136 6278 0115** | Email: **iris@hxplug.com** | Online: **https://www.hxplug.com/cat5e-shielded-two-piece-rj45-connector-6up-2down-stp/**