

Pass-Through RJ45 Plugs

Cat6 Pass-Through RJ45 Connector - Single-Row UTP Unshielded Modular Plug 8P8C, Pure Copper 50μ" Gold-Plated Contacts, Custom Logo OEM, Free Samples

**Key specifications**

Model No.	PT-C6-8P8C-U (single-row pass-through)
Category / Standard	Cat6, ANSI/TIA-568.2-D, ISO/IEC 11801 Class E, IEC 60603-7-4
Configuration	8 Position 8 Contact (8P8C), single-row pass-through
Shielding	UTP / unshielded

Product summary

- **Cat6 Pass-Through Design** – Conductors feed straight through the plug nose for instant T568A/T568B color verification before crimping; cuts termination time by up to 50% and slashes re-work.
- **Single-Row (In-Line) 8P8C Contact Layout** – All 8 pins on one plane for smooth, jam-free wire loading with 23–26 AWG solid and stranded conductors; no load bar required.
- **100% Pure Copper Contacts + 50μ" Gold Plating** – Phosphor bronze / pure copper base with selectable 3μ", 15μ", 30μ" or 50μ" gold over nickel for ultra-low contact resistance and 750+ mating cycles.
- **UTP Unshielded Housing** – 100% virgin polycarbonate, UL 94V-0 flame rated, high-clarity body that stays crack-free after repeated crimp cycles.
- **Verified Cat6 Performance** – 250 MHz bandwidth, 1000BASE-T / 10GBASE-T short-link ready, 100% Fluke DSX-8000 tested, compliant with ANSI/TIA-568.2-D and ISO/IEC 11801 Class E.
- **PoE / PoE+ / PoE++ Ready** – Rated 1.5 A per contact, supports IEEE 802.3af/at/bt up to 90 W for IP cameras, APs and VoIP deployments.
- **Custom Logo & Private Label** – Laser marking or mold-engraved logo on the housing, custom body tint, plus OEM bags, jars, blister cards and branded cartons. Low MOQ for brand start-ups.
- **Free Samples & Factory-Direct Pricing** – Free sample kit shipped worldwide, 50M+ pcs monthly capacity, ISO 9001 / RoHS / REACH compliant, Fluke test reports supplied with every batch.

Product page:

<https://www.cnplugs.com/product/cat6-pass-through-rj45-connector-single-row-utp-pure-copper/>

Category: Pass-Through RJ45 Plugs

Contact & technical support

Email	austin@cnplugs.com
Call / WhatsApp	+86 134 2850 9915
Business hours	Monday-Saturday, 08:30-18:00 (UTC+8)
Contact page	www.cnplugs.com/contact-us/

Product details

Cat6 Pass-Through RJ45 Connector: Single-Row Unshielded Pure Copper Modular Plug for Fast, Fluke-Verified Terminations

The Prounta Cat6 pass-through RJ45 connector is a single-row, unshielded (UTP) 8P8C modular plug engineered for installers and OEM brands that terminate thousands of Ethernet drops a month and cannot afford failed links. Conductors are threaded completely through the plug nose, so the technician confirms the T568A or T568B sequence with their own eyes before the crimp tool ever closes. Combined with pure copper contacts and up to 50µ" gold plating, the result is a plug that passes channel certification the first time — every time. Every production lot is sampled on a Fluke DSX-8000 analyser and shipped with its test report, and free samples are available before you commit to a purchase order.

Why the Pass-Through Structure Wins on Site

Conventional plugs force the installer to trim all eight conductors to an exact length, hold the bundle in sequence, and slide it blindly into the housing. One retracted wire equals one open pair and one failed certification. A pass-through plug removes that guesswork: the wires exit the front face, the installer verifies the color code visually, then a pass-through crimp die seats the contacts and shears the excess copper flush with the nose in a single motion. Field data from cabling contractors consistently shows termination time cut roughly in half and first-pass yield above 99%. For campus rollouts, hotel refurbishments and data-cabinet patch-cord production, that difference dominates labour cost. Our matching [EZ pass-through Cat6 unshielded plug](#) and the wider [pass-through RJ45 plug range](#) use the same tooling standard, so one crimper serves your entire kit.

Single-Row Contact Geometry and Pure Copper Conductivity

This model uses a single-row, in-line contact arrangement: all eight blades sit on one plane rather than in a staggered two-row nose. The benefit is a straight, unobstructed wire channel — 23 to 26 AWG solid or stranded conductors slide through without a load bar and without the snagging that staggered noses can cause on thicker Cat6 insulation. Contacts are stamped from pure copper / phosphor bronze strip, never recycled iron-plated stock, then plated with 3µ", 15µ", 30µ" or 50µ" gold over a nickel barrier. The 50µ" option is our recommendation for PoE++ and for humid, coastal or industrial environments: it holds contact resistance below 20 mΩ and survives 48-hour salt-spray testing. The three-prong IDC blade design bites reliably into both solid and stranded copper, which is why the same plug can be used for horizontal permanent links and for factory-made patch cords. If your project requires a staggered layout with a load bar instead, see our [standard Cat6 UTP modular plug with load bar](#).

Custom Logo, Private Label and OEM Packaging

Distributors and cabling brands can put their own identity on every plug. We offer laser marking or mold-engraved logos on the housing side wall, custom transparent body tints, printed latch colours for cable-ID schemes, and full retail packaging design — poly bags, screw-top jars, blister cards, colour boxes and master cartons with your barcode and SKU. Tooling drawings and 3D renderings are approved with you before mass production. Browse comparable OEM builds such as our [custom logo Cat6 UTP RJ45 connector](#) and the [pure copper Cat6 connector with free-sample program](#).

Applications

Structured cabling in offices, schools, hospitals and hotels; patch-cord and cable-assembly manufacturing; IP surveillance and PoE access-point drops; VoIP and telephony over Cat6 UTP; retail and warehouse Wi-Fi build-outs; and residential smart-home networks. Where cable trays run alongside heavy machinery or high-voltage lines, choose a screened alternative from our [Cat6A and Cat8 shielded plug category](#) instead of UTP.

Do I need a special crimp tool? Yes. A pass-through crimper with an integrated flush-cut blade is required; a conventional die will not shear the protruding conductors. We supply matching tools with sample kits on request.

Will the exposed copper at the nose affect performance or safety? No. The blade trims the conductors flush with the plug face, and the contacts remain fully insulated inside the jack. Terminations routinely pass Cat6 permanent-link certification, including NEXT and return loss.

What is the difference between single-row and staggered plugs? A single-row plug aligns all eight

contacts on one plane for easier loading; a staggered nose offsets pins in two rows to reduce near-end crosstalk on very high-frequency links. For Cat6 at 250 MHz, a well-designed single-row pass-through plug meets specification comfortably.

Are these plugs Cat5e compatible? Yes, they are fully backward compatible with Cat5e and Cat5 UTP cable and with all standard RJ45 jacks — see the [modular connector standard](#) and the [Category 6 cable specification](#) for background.

Technical specifications

Specification	Published value
Model No.	PT-C6-8P8C-U (single-row pass-through)
Category / Standard	Cat6, ANSI/TIA-568.2-D, ISO/IEC 11801 Class E, IEC 60603-7-4
Configuration	8 Position 8 Contact (8P8C), single-row pass-through
Shielding	UTP / unshielded
Bandwidth	250 MHz (10GBASE-T capable on short links)
Contact Material	Pure copper / phosphor bronze
Contact Plating	50µ" gold over nickel (3µ" / 15µ" / 30µ" optional)
Housing Material	Transparent polycarbonate (PC)
IDC Prongs	3-prong, solid & stranded compatible
Conductor Size	23–26 AWG; insulated OD 0.90–1.10 mm
Cable Jacket OD	Up to 6.5 mm
Current Rating	1.5 A per contact (PoE / PoE+ / PoE++ 802.3bt, 90 W)
Voltage Rating	150 V AC (rms)
Contact Resistance	≤ 20 mΩ
Insulation Resistance	≥ 500 MΩ @ 500 V DC
Dielectric Strength	1000 V AC / 1 minute, no breakdown
Durability	≥ 750 mating cycles
Operating Temperature	-40 °C to +85 °C
Compliance	RoHS, REACH, ISO 9001; UL-recognised material
Packaging	100 pcs/bag, 50/100 pcs jar, blister card, OEM branded carton
MOQ / Lead Time	Stock items from 1,000 pcs; custom logo from 10,000 pcs; 7–15 days