

Standard Cat6 & Cat5e Plugs

Pure Copper Cat6 RJ45 Connector UTP Modular Plug 8P8C - Custom Logo, 3-Prong Gold Plated Contacts with Load Bar, 100% Virgin PC, Free Samples

**Key specifications**

Model / Type	Cat6 UTP RJ45 modular plug, 8P8C, two-piece with load bar, custom logo
Contact Base Material	Pure copper alloy (non-magnetic, no iron core / no copper-clad steel)
Contact Design / Plating	3 prongs (tri-fork), staggered 6-up/2-down; nickel + 3μ"/6μ"/15μ"/30μ"/50μ" gold
Logo Options	Laser engraving (MOQ 10,000 pcs) or in-mold embossing (MOQ 100,000 pcs)

Product summary

- **Cat6 UTP 8P8C RJ45 plug with pure copper contacts** — solid copper base (no iron-core or copper-clad substitutes) for maximum conductivity and PoE safety
- **Free samples for qualified B2B buyers** — test crimp force, Fluke performance, and cable fit on your own line before ordering
- **True Cat6 to 250MHz:** staggered 6-up/2-down contacts with load bar; supports 1000BASE-T, 2.5G/5GBASE-T, and short-run 10GBASE-T
- **3-prong gold plated blades** (3μ"-50μ" optional) pierce and grip solid & stranded 23-26AWG conductors; contact resistance ≤20mΩ
- **Custom logo & private label:** laser engraving from 10,000 pcs or in-mold embossing, plus branded bags, boxes, and cartons
- **100% virgin PC housing, UL 94V-2** — 100% Fluke DSX tested, CE/UL/RoHS/REACH, 50M+ pcs monthly capacity, 7-15 day lead time

Product page:

<https://www.cnplugs.com/product/pure-copper-cat6-rj45-connector-custom-logo-free-samples/>

Category: Standard Cat6 & Cat5e Plugs

Contact & technical support

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Product details

Pure Copper Cat6 UTP RJ45 Connector - Custom Logo 3-Prong Gold Plated Modular Plug with Free Samples

The pure copper Cat6 unshielded RJ45 modular plug from PROUNTA answers the question every serious buyer asks first: what metal is actually inside the connector? While low-cost plugs hide iron-core or copper-clad-steel pins behind a thin gold flash, every contact blade in this plug is stamped from solid pure [copper](#) alloy strip, nickel-barriered, and finished in hard gold up to 50µ". Combined with a staggered 6-up/2-down contact layout, an insert load bar, and a housing molded from 100% virgin polycarbonate, this connector delivers certified performance to 250MHz over [Category 6 cable](#) — with Gigabit, 2.5G/5GBASE-T multi-gig, and short-run 10GBASE-T support. Add your logo, choose your packaging, and request free samples to verify everything on your own crimping line before you commit to a single carton.

PROUNTA is a factory-direct RJ45 connector manufacturer running pin stamping, electroplating, injection molding, laser marking, and 100% Fluke DSX component testing under one roof, with 50M+ pcs monthly capacity serving global distributors and OEM brands.

Pure Copper Contacts: The Difference a Magnet Can Prove

The fastest test for a fake "copper" plug is a magnet — iron-core pins stick, pure copper never does. Beyond passing the magnet test, genuine pure copper contacts deliver three engineering advantages. Conductivity: copper's low bulk resistance minimizes voltage drop and contact-point heating, critical on PoE, PoE+, and PoE++ links feeding cameras, access points, and IP phones around the clock. Corrosion resistance: iron-core pins rust from the inside out once humidity penetrates the plating, causing intermittent faults that are almost impossible to troubleshoot in the field; solid copper has no such failure mode. Crimp integrity: copper's ductility lets the 3-prong blades deform cleanly around the conductor without micro-cracking, so terminations stay gas-tight for the life of the link. Every copper strip lot we buy is documented with material certificates, and we welcome third-party spectrometer verification on samples.

True Cat6 Architecture: 6-Up/2-Down Staggered Contacts with Load Bar

This plug uses the industry-proven two-piece Cat6 design. Conductors thread through a load bar that stages them in a 6-up/2-down staggered pattern, increasing wire-to-wire spacing at the termination point to control near-end crosstalk (NEXT) and preserve return-loss margin at 250MHz — the parameters where single-row "Cat6" plugs fail Fluke certification. The load bar also locks the T568A/T568B sequence before crimping, cutting mis-wire rejects on production lines. Each 3-prong gold plated blade drives three staggered tines through the insulation to grip solid or stranded 23–26AWG copper tightly, achieving ≤20mΩ contact resistance and 750+ mating cycles.

Free Samples: Test Before You Order

Datasheets don't crimp cables — your tools do. That's why we ship free samples to qualified B2B buyers: distributors, patch cord factories, installers, and brands evaluating a supplier switch. Test the plugs with your crimping tools, your cable brands, and your Fluke tester; compare plating quality under magnification; run the magnet test on the pins. Samples of different gold thicknesses (3µ" to 50µ") can be included in one shipment so your team can select the right grade per market. When you're ready for a branded program, we produce a free logo mockup within 24 hours and physical pre-production samples with your logo before mass production begins.

Custom Logo and Private Label Packaging

Applications and Target Buyers

Pure copper Cat6 plugs are specified by patch cord factories exporting to quality-audited markets, PoE surveillance and access-point installers who cannot afford heat-related failures, national distributors building trusted house brands, and IT integrators standardizing consumables across multi-gig office networks. The plug follows the universal 8P8C modular geometry, crimps with all standard RJ45 tools, and inter-mates with every compliant jack, keystone, and patch panel while remaining backward compatible with Cat5e links.

How to Start: Samples First, Then Scale

Q1: How do I request free samples, and what's included?

Submit an inquiry with your company details and application. Qualified B2B buyers receive samples free of charge — typically 20–50 pcs, optionally mixed across gold plating grades. Standard courier delivery takes 3–7 days worldwide.

Q2: How can I confirm the contacts are pure copper, not iron-core?

Three ways: the magnet test (iron-core pins are magnetic, copper is not), our material certificates supplied per copper lot, and third-party spectrometer analysis (SGS/TÜV) which we fully support on pre-shipment samples.

Q3: Does pure copper cost much more than iron-core plugs?

The per-piece difference is small — typically under 15% — but it eliminates the field-failure and warranty costs that iron-core plugs create in PoE and humid environments. For branded programs, the reliability difference protects your reputation.

Q5: Will this plug pass Fluke channel testing with my Cat6 cable?

Every batch is 100% Fluke DSX-8000 component tested, and the 6-up/2-down load bar design is engineered for NEXT and return-loss headroom. Send us your cable sample — we'll crimp, test, and return the Fluke report before mass production.

Technical specifications

Specification	Published value
Model / Type	Cat6 UTP RJ45 modular plug, 8P8C, two-piece with load bar, custom logo
Contact Base Material	Pure copper alloy (non-magnetic, no iron core / no copper-clad steel)
Contact Design / Plating	3 prongs (tri-fork), staggered 6-up/2-down; nickel + 3μ"/6μ"/15μ"/30μ"/50μ" gold
Logo Options	Laser engraving (MOQ 10,000 pcs) or in-mold embossing (MOQ 100,000 pcs)
Samples	Free for qualified B2B buyers; mixed plating grades in one shipment
Housing Material	Transparent polycarbonate (PC)
Compatible Cable	Cat6 UTP, solid or stranded, 23–26AWG
Insulated Wire OD / Jacket OD	0.85–1.05mm (0.033"–0.041") / ≤6.5mm (0.256")
Frequency / Application	250MHz; 1000BASE-T, 2.5G/5GBASE-T, 10GBASE-T (short run); PoE / PoE+ / PoE++
Durability	≥750 insertion cycles; contact resistance ≤20mΩ
Dimensions	22.4 × 11.6 × 8.0mm (0.88" × 0.46" × 0.31")
Standards	ANSI/TIA-568.2-D Cat6, ISO/IEC 11801, FCC Part 68, IEC 60603-7
Certifications	RoHS, REACH, CE, UL; 100% Fluke DSX component tested; material certificates
Packaging / Lead Time	100 pcs/bag, 1000 pcs/box, OEM options; 7–15 days after approval