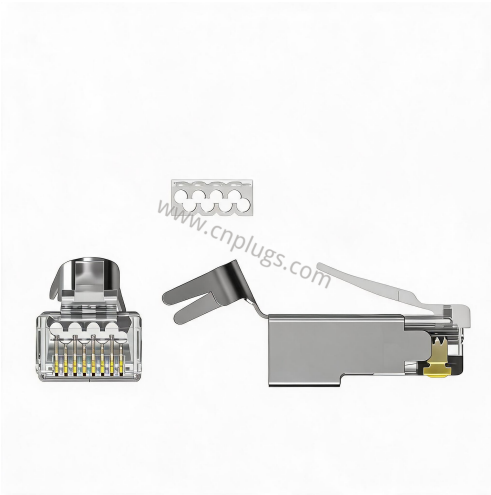


Cat6A & Cat8 Plugs

Cat7 Shielded RJ45 Plug 8P8C STP, Gold-Plated 10Gbps Modular Connector with Separator



Key specifications

Interface	RJ45 / 8P8C male, cable mount
Category / class	Cat7 / ISO/IEC 11801 Class F, 600 MHz
Data rate	10GBASE-T (10 Gbps) on a qualified channel
Shielding	Fully shielded STP; nickel-plated copper or zinc-alloy can + tail clamp

Product summary

- Cat7 / Class F 8P8C male plug for 10GBASE-T up to 600 MHz
- Fully shielded STP metal shell bonds cable braid and foil to the jack
- Integrated pair separator / load bar keeps twists and cuts NEXT and ANEXT
- 50 µin gold-plated 3-prong terminals for solid or stranded 22–24 AWG
- Two-piece body: PC insulator + nickel-plated copper or zinc shield + tail clamp
- Fits S/FTP, F/FTP, and STP Cat7 / Cat6A round cable, typical jacket 6.5–8.2 mm
- PoE / PoE+ / PoE++ capable when the channel is designed for it
- OEM bulk pack for patch-cord factories, data-center harnesses, and MRO kits

Product page:

<https://www.cnplugs.com/product/cat7-shielded-rj45-8p8c-stp-plug-separator-10gbps/>

Category: Cat6A & Cat8 Plugs

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Product details

Cat7 Fully Shielded 8P8C RJ45 Plug with Pair Separator for 10 Gbps

This Cat7 RJ45 modular plug is a fully shielded 8P8C STP connector with an internal pair separator and gold-plated terminals. It is built to terminate Cat7 and Cat6A shielded cable for 10GBASE-T channels up to 600 MHz. Patch-cord plants, data-center integrators, and industrial network OEMs specify three things on this part: a 360° metal shield, a load-bar separator that holds pair geometry inside the plug, and 50-microinch gold on a three-prong contact so both solid and stranded conductors stay gas-tight after crimp.

A standard unshielded Cat5e RJ45 plug will not pass a Cat7 channel. The jacket is thicker, the pairs are individually foiled, and alien crosstalk limits 10 Gbps if the last 13 mm of wire are left untwisted. This plug's separator takes each pair through its own pocket so the twist is preserved up to the gold blade. The nickel-plated shield can then folds onto the braid and foil and crimps with the tail clamp, giving a continuous earth path from cable to jack. For unshielded office cords, use a [Cat6 UTP RJ45 plug](#). For VFD keypad tails, use a [VFD 8P8C panel plug](#) — those are a different length and are not Cat7-rated.

[Category 7 cable](#) is a shielded twisted-pair class (ISO/IEC 11801 Class F) specified to 600 MHz. In the field it is almost always S/FTP or F/FTP. The mating face on this plug is still the familiar [8P8C modular connector](#) used on RJ45 Ethernet, so the finished cord plugs into any standard 8P8C jack. Category performance lives in the cable, the plug geometry, and the tested channel — not in the letters printed on a cheap unshielded shell.

Why the Separator and Full Shield Matter at 10 Gbps

At 10GBASE-T the four pairs transmit at once. Near-end crosstalk and alien crosstalk from the next cord in a bundle set the noise floor. A load-bar separator does two jobs: it stops the installer from crossing pairs, and it keeps each pair in its own dielectric pocket so the last untwist is only a few millimeters. The STP shell then kills EMI from VFDs, fluorescent ballasts, and 5 GHz radios that sit next to a cabinet switch. Together they are why this SKU is sold as a Cat7 plug and not as a generic 8P8C.

Contacts are phosphor bronze or brass, three-prong, 50 µin gold over nickel. Three prongs bite solid 22–24 AWG and stranded patch wire without a second die. Typical electrical class: contact resistance ≤ 20 mΩ, insulation $\geq 1,000$ MΩ, dielectric 1,000 VAC, 1.5 A / 125 VAC signal rating. Mechanical life is 750 cycles minimum. The insulator is UL 94 V-0 or V-2 polycarbonate. Operating range is typically -40 °C to $+70$ °C for the finished plug; confirm the cable jacket rating separately.

Cable, AWG, and crimp tool

Use shielded Cat7 or Cat6A round cable, 22–24 AWG conductors, insulation OD about 1.3–1.45 mm, jacket about 6.5–8.2 mm. Fold foil and braid onto the shield tail before the clamp closes. T568A or T568B both fit the separator — print the map on the work instruction. A Cat6A/Cat7 shielded crimp tool with an 8P8C die and a shield anvil is required. A telephone-style tool will not fold the can and will fail the shield continuity test. Need finished cords instead of loose plugs? See our Cat7 S/FTP patch cables.

Where this plug is used

Typical jobs: OEM Cat7 patch-cord production, data-center 10G ToR and leaf-spine jumpers, shielded drops in hospitals and labs, industrial Ethernet next to motor drives, 4K/8K AV over IP, PoE++ camera and access-point tails, and MRO replacement of failed 10G cords. The 8P8C nose fits any RJ45 jack; the Cat7 rating only holds when the cable, plug, and jack are a tested shielded channel.

Building a complete 10G kit? Add Cat7 shielded keystone jacks, S/FTP bulk cable, and shielded RJ45 crimp tools on the same PO.

Buying Notes for Patch-Cord OEMs and Integrators

Write the PO as: Cat7 STP RJ45 8P8C male, fully shielded, with separator / load bar, 50 µin gold, 22–24 AWG, 10 Gbps. Do not substitute a Cat5e shielded plug or a pass-through Cat6 plug unless you re-qualify the channel. Pass-through designs are faster on the bench but often fail Cat7 NEXT if the separator is omitted. Two-piece load-bar plugs are the usual choice for audited 10G cords.

Incoming inspection

Confirm eight staggered or in-line gold blades, a separate load bar, and a metal can that folds onto the braid. After crimp: shield continuity from braid to plug shell $\leq$ a few milliohms; no shorts pin-to-pin or pin-to-shell; pair map T568A or B as specified. Optional 100% patch-cord test to ISO 11801 Class F or TIA Cat6A is available when we supply finished Cat7 cords.

Technical specifications

Specification	Published value
Interface	RJ45 / 8P8C male, cable mount
Category / class	Cat7 / ISO/IEC 11801 Class F, 600 MHz
Data rate	10GBASE-T (10 Gbps) on a qualified channel
Shielding	Fully shielded STP; nickel-plated copper or zinc-alloy can + tail clamp
Pair management	Internal separator / load bar (2-piece)
Wiring	T568A / T568B
Housing	Polycarbonate, UL 94 V-0 / V-2
Contact material	Phosphor bronze or brass, 3-prong
Contact plating	50 µin (1.27 µm) gold over nickel (15 / 30 µin optional)
Wire range	22–24 AWG solid or stranded (typical); confirm insulation OD
Conductor insulation OD	Approx. 1.30–1.45 mm
Cable jacket OD	Approx. 6.5–8.2 mm shielded round
Cable types	Cat7 / Cat7A / Cat6A S/FTP, F/FTP, STP
Current / voltage	1.5 A / 125 VAC (signal); PoE / PoE+ / PoE++ capable
Contact resistance	$\leq 20 \text{ m}\Omega$
Insulation resistance	$\geq 1,000 \text{ M}\Omega$
Dielectric withstanding	1,000 VAC, 60 s
Mating cycles	≥ 750
Operating temperature	–40 °C to +70 °C (typical)
Compliance	RoHS; REACH on request; UL 94 housing; FCC Part 68 geometry

Specification	Published value
OEM / ODM	Gold thickness, shield finish, load-bar color, bag or box count