



Cat5e RJ45 Unshielded Modular Plug

Standard (Non-Pass-Through) | 8P8C | Cat5e UTP | Gold-Plated Contacts



1. GENERAL DESCRIPTION

Cat5e RJ45 unshielded modular plug is an 8P8C connector for field termination of Category 5e UTP cable. It is used to make patch cords and to terminate equipment cables, giving reliable, low-crosstalk connections that meet Category 5e requirements when terminated according to the instructions. The clear, flame-retardant housing and gold-plated phosphor bronze contacts provide durable, stable electrical performance with Gigabit Ethernet (1000BASE-T) and PoE.

2. KEY FEATURES

- Category 5e (100 MHz) performance, unshielded (UTP) construction
- Gold-plated phosphor bronze contacts for low contact resistance and corrosion resistance
- Standard (non-pass-through) design with internal wire guide / load bar for accurate pair positioning
- Clear, flame-retardant polycarbonate housing, UL 94 V-0, lets you check the conductor order and seating
- Suitable for solid and stranded Cat5e UTP cable, [24–26 AWG]
- Strong strain relief and latch: positive snap with standard RJ45 jacks

3. APPLICATIONS

- Making Cat5e patch cords and equipment cords of custom length
- Termination of Cat5e UTP cable for switches, routers, servers and workstations
- Repair and re-termination of damaged plugs; PoE, CCTV and access-point connections

4. APPLICABLE STANDARDS

- ANSI/TIA-568.2-D — Category 5e connecting hardware and cords
- ISO/IEC 11801 — Class D generic cabling
- IEC 60603-7 — 8-position modular connector (RJ45)
- FCC 47 CFR Part 68 — Modular plug requirements
- UL 94 V-0 — Flammability of plastic housing; RoHS [Compliant — Directive 2011/65/EU]

5. CONSTRUCTION & MATERIALS

Connector	RJ45 (8P8C) modular plug, unshielded (UTP)
Housing	Clear polycarbonate, UL 94 V-0
Contacts	Phosphor bronze, gold-plated — [50 µm / 1.27 µm], [3-prong / 2-prong]



Wire Guide / Load Bar	[Included — internal / separate] for pair alignment
Strain Relief	Integrated strain-relief tab
Compatible Cable	Cat5e UTP, solid or stranded, [24–26 AWG], jacket OD [4.8–5.8 mm]
Termination Tool	Standard RJ45 (8P8C) crimping tool

6. MECHANICAL & ENVIRONMENTAL

Mating Cycles (min.)	[750] cycles
Cable Retention Force	[≥ 50 N]
Operating Temperature	[-20 °C to +60 °C]
Storage Temperature	[-40 °C to +70 °C]
Relative Humidity	[10 % to 90 %, non-condensing]

7. ELECTRICAL CHARACTERISTICS

Contact Resistance	[≤ 20 mΩ]
Insulation Resistance	[≥ 500 MΩ]
Dielectric Withstand (1 min)	[1000 V AC]
Current Rating per Contact	[1.5 A]
Max. Operating Voltage	[72 V]
Transmission Category	Category 5e — up to 100 MHz (when terminated with Cat5e cable per instructions)

8. WIRING (PIN ASSIGNMENT)

Pin	T568B Colour	T568A Colour
1	White / Orange	White / Green
2	Orange	Green
3	White / Green	White / Orange
4	Blue	Blue
5	White / Blue	White / Blue
6	Green	Orange
7	White / Brown	White / Brown
8	Brown	Brown

9. TERMINATION GUIDELINES

- Strip about 12–15 mm of the outer jacket without nicking the conductor insulation, then untwist the pairs and arrange them in T568A or T568B order.
- Flatten and align the conductors, cut them evenly, and insert them fully until each wire reaches the end of the plug.
- Check through the clear housing that the wire order is correct and the jacket sits behind the strain-relief position.
- Crimp in a standard RJ45 crimping tool in one firm squeeze, ensuring the contacts pierce the insulation and the strain relief grips the jacket.
- Test every terminated cord with a cable tester and do not re-use a crimped plug.