

Industrial & Inverter RJ45 Plugs

VFD RJ45 Connector 33mm, 8P8C Male Modular Plug for Inverter Keypad & Panel Ethernet



Key specifications

Connector type	RJ45 / 8P8C male plug (cable mount)
Positions / contacts	8 positions, 8 conductors
Body length	33 mm (extended; standard plugs are typically ~22 mm)
Housing material	Transparent polycarbonate (PC)

Product summary

- 33 mm extended-body RJ45 male plug built for VFD inverter panels and remote keypads
- True 8P8C modular interface for keypad, HMI, and drive communication ports
- Gold-plated phosphor bronze contacts for low resistance and stable Modbus / Ethernet links
- High-strength polycarbonate housing for cabinet doors, OEM assembly, and field replacement
- Extra length vs. standard 22 mm plugs — reaches recessed jacks and panel cut-outs
- IDC crimp termination for 24–26 AWG stranded or flat communication cable
- Typical pack: 100 pcs/box, 1,000 pcs/carton for OEM and MRO buyers
- OEM / ODM: logo, housing color, gold thickness, and private-label cartons available

Product page:

<https://www.cnplugs.com/product/vfd-rj45-connector-33mm-8p8c-male-inverter-panel-plug/>

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Product details

33 mm VFD RJ45 8P8C Male Plug for Inverter Panels

This VFD RJ45 connector is a 33 mm male 8P8C modular plug made for variable frequency drive panels, remote operator keypads, and industrial Ethernet or serial communication ports. Standard 22 mm RJ45 plugs often sit short of a recessed jack or fail to pass a cabinet door. The 33 mm body gives the extra reach panel builders and drive OEMs need without changing the familiar 8P8C mating face.

Procurement teams searching for a VFD RJ45 plug, inverter keypad connector, or frequency inverter Ethernet connector will find this part specified for the same role as the communication plug on many AC drives: linking the local keypad, a door-mounted HMI, or a PLC network cable to the drive. It is a cable-mount male plug, not a PCB jack. Pair it with your existing VFD RJ45 communication cables and inverter keypad accessories for a complete operator-panel kit.

A [variable-frequency drive](#) controls motor speed by converting fixed-frequency line power into a variable-frequency, variable-voltage output. That control loop depends on a clean, repeatable connection between the drive, the keypad, and the plant network. This plug is built for that duty: gold-plated contacts, a rigid polycarbonate shell, and a latch that stays seated under vibration typical of pump, fan, conveyor, and CNC cabinets.

Why Panel Builders Specify a 33 mm Modular Plug

On many inverter families the communication port sits behind a plastic bezel or inside a deep operator pocket. A short plug bottoms out on the bezel before the contacts fully wipe. The 33 mm housing clears that interference and still presents a standard 8P8C nose to the jack. The same extra length helps when the cable must pass a 22 mm or 7/8 in. panel hole and then mate to a keypad on the outside of the door.

The interface follows the well-known [8P8C modular connector](#) geometry used on RJ45 Ethernet and on most VFD keypad ports. Note that a VFD keypad cable is often a pin-to-pin or vendor-mapped serial link, not always IEEE 802.3 Ethernet. Confirm pinout against the drive manual before crimping. For ready-made assemblies, see our VFD inverter RJ45 keypad cables.

Built for industrial mating cycles

The insulator is high-strength polycarbonate with a UL 94 V-0 flammability rating, chosen for dimensional stability from -40 °C to +85 °C. Contacts are phosphor bronze with gold over nickel. Gold keeps contact resistance low after oxidation and after hundreds of insert/extract cycles on a service keypad. Typical values: contact resistance ≤ 20 mΩ, insulation resistance ≥ 1,000 MΩ, dielectric withstand 1,000 VAC for 60 seconds, mechanical life ≥ 750 cycles.

Termination is IDC / crimp for 24-26 AWG stranded or flat 8-conductor cable. The load bar keeps conductors aligned so a standard RJ45 crimp tool can finish the joint in one stroke — important on an OEM line running thousands of inverter harnesses per week. Net weight is about 3.6 g per plug, so carton freight stays predictable for export orders.

Where this connector is used

Typical applications include door-mounted VFD keypads, remote LCD operator stations, Modbus RTU / RS-485 links that use an RJ45 shell, Ethernet/IP or Modbus TCP patch leads at the drive, spindle inverter comms on CNC routers, HVAC fan-wall cabinets, and spare-parts kits for system integrators.

If you are building a full remote-operator package, add a matching industrial Ethernet connector or a panel-mount RJ45 coupler so the door cable can be unplugged without opening the enclosure.

Technical specifications

Specification	Published value
Connector type	RJ45 / 8P8C male plug (cable mount)
Positions / contacts	8 positions, 8 conductors

Specification	Published value
Body length	33 mm (extended; standard plugs are typically ~22 mm)
Housing material	Transparent polycarbonate (PC)
Housing color	Transparent / crystal (black or custom color on request)
Contact material	Phosphor bronze
Contact plating	Gold over nickel (flash / 3 µin / 15 µin / 30 µin optional)
Shielding	Unshielded standard; shielded shell available for OEM
Termination	IDC crimp
Wire range	24–26 AWG, stranded or flat 8-conductor cable
Rated current / voltage	1.5 A / 125 VAC (signal / communication duty)
Contact resistance	≤ 20 mΩ
Insulation resistance	≥ 1,000 MΩ at 500 VDC
Dielectric withstanding voltage	1,000 VAC, 60 s
Operating temperature	–40 °C to +85 °C
Mating cycles	≥ 750
Unit net weight	Approx. 3.6 g
Standard pack	100 pcs/box; 1,000 pcs/carton (30 × 22 × 17 cm)
Compliance	RoHS; REACH on request; UL 94 V-0 housing
OEM / ODM	Private label, gold thickness, color, and carton mark