

MODULAR CONNECTOR GUIDE

What are modular connectors?

Modular connectors are commonly used for telephone systems, data networks, and low-speed serial connections. These connectors are inexpensive, relatively simple to terminate, and easy to plug and unplug. A modular connector typically has a clear, plastic body, with a tab that locks the plug and jack into place when connected. In the vernacular used by the technology industry, they are called "RJ" connectors. This is technically inaccurate, but the naming convention is widely used. RJ is an acronym for Registered Jack, which is part of a coding system developed in the 1970s by AT&T to classify telephone services and equipment. The system, called the Universal Service Order Code (USOC), used designations that began with the letters RJ to denote the capabilities of jacks in a building, and how they should be wired in order to connect to the public phone network. RJ plug connections are typically terminated by using a special tool to crimp the connector onto the conductors of a cable. These connections are often made in the field for convenience; however, a factory-assembled RJ cable typically offers the best performance.

Select the modular connector that you want to learn more about:



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 ${\bf e}$ Click image to expand

4-pin RJ-11

Male:





The wiring scheme for a single line phone was identified as "RJ11", and the name stuck to describe the connector used on a phone cord. Today, RJ-11 is widely used in the connectivity industry to denote a 6-position, 4-conductor modular connector or jack.

Shop 4-pin RJ-11 >

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RJ-45

Male:





An 8-position, 8-conductor modular connector that is most often used for data networks such as Ethernet. RJ-45 connectors are physically wider than the RJ-11/12 connectors used for telephone. In network applications, RJ-45 cable assemblies are used to connect from a patch panel to a network switch, and also to connect a computer's NIC to a data port.

Shop RJ-45 🗲

Female:





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10-pin RJ-45

This is a 10-position, 10-conductor modular connector. This is a relatively uncommon connector. The typical application for this connector is on a T1 cable.

Shop 10-pin RJ-45 >

RJ-48

RJ-48 is actually the same modular connector as an RJ-45 connector in that it has 8 positions and 8 conductors. However, the term is often used to describe a shielded version of the RJ-45 connector. RJ-48 connections are commonly used for T1 or other "leased-line" applications.

Shop RJ-48 >

DEC MMP/MMJ

A special version of the 6-position (RJ-11/12) plug. MMP stands for Modified Modular Plug (MMJ for Modified Modular Jack), and it is easily recognized by its locking tab, which is offset from the center of the plug body. MMP/MMJ connections were often found on equipment manufactured by the now-defunct Digital Equipment Corporation (DEC), and so the name lives on in this connector.

RJ-22

A smaller version of the RJ-11 modular plug, the RJ-22 has only 4 pin positions. It is typically used on telephone handsets. RJ-22 is an "unofficial" designation, not part of the official USOC recognized by the FCC.

Still not sure?

We're here to help, just contact us!

Suggested links:

Wikipedia - Modular
Connector

☑ More products:

- Network Modular Adapters
- Cat5e Patch Cables
- Cat6 Patch Cables
- Cat6a Patch Cables