

High Density, CAT 5e MRJ21 Connector & Cable Assemblies

Product Facts

- Designed to meet or exceed CAT 5e crosstalk. Contact layout and footprint for differential pairs creates reduced crosstalk and built in compensation.
- 1.5 to 3 times the port density of 2x6 stacked Mod Jack (RJ45)
- 3 times port density of an RJ21
- Height of dual receptacle meets requirements of Compact PCI component standard
- Fully shielded system to control EMI
- Robust die cast cable covers provide 45° left or right cable exit for ease of routing
- 1mm pair spacing, 1.5 pair to pair spacing
- Listed by Underwriters Laboratories Inc., File No. E81956 
- Produced under a Quality Management System Certified to ISO 9001

A copy of the certificate is available upon request



PCB Connector Part Numbers

Description	Base Part Number*
MRJ21 48-Position Receptacle Assembly	1761482-X

*Dash number indicates specific product features. See customer drawing or call your local Tyco Electronics Sales Representative for more information.

Cable Assembly Part Numbers

Description	Base Part Number**
MRJ21 Product to MRJ21 Product – Braided Shield	6653346-X
MRJ21 Product to MRJ21 Product – Unshielded	6653347-X
MRJ21 Product to RJ21 telecom connector – CAT 5 Braided Shield	6653348-X
MRJ21 Product to (12) RJ45 (2 pair/plug) – CAT 5 Braid Shield	6653439-X
MRJ21 Product to (12) RJ45 (2 pair/plug) – GbE 24 Pair UTP	6371664-X
MRJ21 Product to (6) RJ45 (4 pair/plug) – CAT 5 Braid Shield	6434918-X
MRJ21 Product to (6) RJ45 (4 pair/plug) – CAT 5e UTP	6713358-X

**Lengths are determined by dash number. Call your local Tyco Electronics Sales Representative for the specific Part Number for your required length cable assembly, or for other configurations not listed above.

Electrical Design Objectives

Voltage Rating — 250 Vac
Current Ratings (Signal) — 0.5 Amp
Dielectric Withstanding Voltage —
 1,000 Vac (contact to contact);
 1,500 Vac (contact to ground)
Insulation Resistance —
 1,000 megaohms
Crosstalk — CAT 5e minimum

Environmental Design Objectives

Rated Temperature —
 -55°C to +85°C
Thermal Shock —
 5 cycles, -55°C to +85°C
Humidity – Temperature —
 50 cycles, 25°C to +65°C
Temperature Life —
 500 hours, +85°C

Mechanical Design Objectives

Vibration — 5-500 Hz
Physical Shock — 30 G Peak
Durability — 500 cycles

Note: Future enhancements include press fit design and integrated ganged versions. Consult Tyco Electronics Sales Representative for additional information.

Note: All part numbers are RoHS compliant.

MRJ21 Cassettes and Patch Panels

Product Facts

- High performance copper cabling solution
- High density, small form factor connectivity
- Factory terminated and tested solution
- Modular, pluggable solution
- Application specific cassettes

System Features and Benefits

- MRJ21 product provides an application independent copper platform for applications today and into the future — including Gigabit, VoIP & powered Ethernet
- The small size of the MRJ21 connector and cabling reduces cable bulk in pathways and spaces, enabling much higher port counts in a smaller space
- Factory termination and testing of the cassettes and patch panels provide assurance of pluggable performance on site. This enables rapid installation or MACs with pre-tested quality.
- The modularity of this solution significantly reduces time to install or migrate from a 10/100 Base-T 2-pair platform to a Gigabit Ethernet 4-pair platform. Upgrading is as simple as unplugging one cassette and plugging in the new one. The same cable is re-usable.
- Cassettes and patch panels break out high performance 24-pair solutions to the appropriate wiring patterns for standards-based 10/100 Base-T, Gigabit Ethernet, and other applications
- Common cable assembly lengths provide readily available, pluggable solutions, speeding implementation



12-Port Cassette
Front



48-Port Angled Patch Panel
Loaded



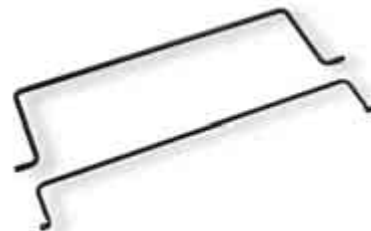
6-Port Cassette
Front



6-Port, 12-Port Cassette
Back



Patch Panel



Cable Support Bar

Description	Part Number
Cassette, 6-Port, 10/100/1000 Base-T (4-Pair)	1479459-1
Cassette, 12-Port, 10/100 Base-T (2-Pair)	1479452-1
Patch Panel, 1U, 3-Cassette	1479451-1
Cable Support Bar 5" Deep	557548-1
Angled Patch Panel, 48-Port, 10/100/1000 Base-T	1777052-1
AMPTRAC Angled Patch Panel, 48-Port, 10/100/1000 Base-T	1777053-1*

*I/O Cable sold separately. See AMPTRAC Connectivity Management Data Sheet (1309354) for more information.

Note: Additional hardware options are available. Contact your Tyco Electronics Sales Engineer or check our website for the latest updates.

Note: All part numbers are RoHS compliant.