

Quick Reference GuideRJ *point five* Connector System

The RJ point five connector system is the next generation Ethernet link, offering a higher density cabling solution for Original Equipment Manufacturers (OEMs) who desire a lower cost per port while maintaining the convenience of a single connector per channel. The port spacing is on a 7mm centerline, occupying half the space than that of traditional RJ45 Ethernet link. In addition to the high density receptacle, Tyco Electronics offers the mating cable assembly, as well as cable management solutions for single box and rack configurations. The receptacle and cable assembly were redesigned to eliminate the undesirable RJ45 split pair configuration, resulting in heightened electrical performance. Additionally, the latching feature incorporates an easy-to-use lanyard that will facilitate up to 96 ports on a single line card. Due to the density on the receptacle face, the light from the LEDs is transferred out through the cable boot, bringing the port indicator light closer to the end user.

FEATURES AND BENEFITS

- Approximately double the density offered over the standard RJ45 Ethernet link
- Same footprint to support both integrated magnetic and non-integrated solutions
- Cable assemblies capable of field termination
- Cable management features available from Tyco Electronics for higher density configurations
- Product family will support Gigabit speeds of Cat5e UTP cable, and roadmap supports PoE+ and 10Gig over Cat6a
- Receptacle is a modular design to allow for easy and rapid deployment of product extensions





Product Applications

- · High density Ethenet switching/routing products
- Data center switching applications:
 - Top of rack
 - End of row
 - Mid-row
- Server I/O applications
- · Wiring closet switching products

Mechanical

- Port center-on-center spacing at 7mm for Cat5e cabling
- · Overall height is 25.25mm
- High density cabling consists of ergonomically friendly lanyard for easy extraction
- Port indicator LEDs conveniently located on the cable boot to facilitate easy viewing

Electrical/Optical

Product meets category 5e performance for 10/100/1000BASE-T applications

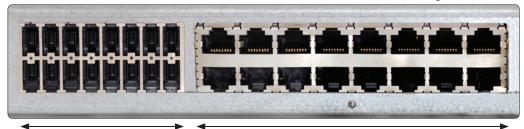
- Insertion loss 0.4 dB maximum at 100 MHz
- Return loss 20 dB minimum at 100 MHz
- NEXT loss 43 dB minimum at 100 MHz
- FEXT loss 35.1 dB minimum at 100 MHz

Magnetic product performs for 10/100/1000BASE-T applications

- Insertion loss 1.5 dB maximum at 100 MHz
- Return loss 10 dB minimum at 100 MHz
- · Crosstalk 31 dB minimum at 100 MHz
- Common Mode Rejection Ratio 17 dB minimum at 100 MHz
- Isolation voltage complies with IEEE 802.3

RJ point five Connector Comparison to RJ45*

*Drawing not shown to scale



RJ Point Five Connector

115.06 mm RJ45

RJ point five Board Mount Receptacles and Plug Kit **LEDs Part Number** Description **Integrated Magnetics Customer Drawings Product Available** 2007669-1 Yes (R/G) 2x8 Receptacle Yes Yes Yes 2007669-2 2x8 Receptacle Yes Yes (Y/G) Yes Yes 2057133-1 2x8 Receptacle No Yes (R/G) Yes Yes 2057133-2 Yes (Y/G) 2x8 Receptacle No Yes Yes 2007311-1 2x6 Receptacle Yes Yes (R/G) Yes No 2007311-2 2x6 Receptacle Yes Yes (Y/G) Yes No 2057132-1 2x6 Receptacle No Yes (R/G) Yes No 2057132-2 2x6 Receptacle No Yes (Y/G) Yes No 2057004-1 2x12 Receptacle Yes Yes (R/G) Yes Yes 2057004-2 2x12 Receptacle Yes (Y/G) Yes 2057134-1 2x12 Receptacle No Yes (R/G) Yes Yes 2057134-2 2x12 Receptacle No Yes (Y/G) Yes Yes 2057014-1 Yes Yes (R/G) 2x1 Receptacle Yes No 2057014-2 2x1 Receptacle Yes Yes (Y/G) Yes No 2057131-1 2x1 Receptacle No Yes (R/G) Yes No 2x1 Receptacle No Yes (R/G) Yes 2007312-1 Plug Kit Yes Yes



RJ point five Connector Demo Rack



Part Number	Cable Length	Status
2100356-1	0.5 meters	Available
2100356-2	1.0 meters	Available
2100356-3	1.5 meters	Available
2100356-4	2.0 meters	Available
2100356-5	2.5 meters	Available
2100356-6	3.0 meters	Available
2100356-7	4.0 meters	Available
2100356-8	5.0 meters	Available
2100356-9	7.5 meters	Available
1-2100356-0	10.0 meters	Available
1-2100356-1	12.5 meters	Available
1-2100356-2	15.0 meters	Available

RJ point five to RJ45 Cable Assembly

Part Number	Cable Length	Status
2100357-1	0.5 meters	Available
2100357-2	1.0 meters	Available
2100357-3	1.5 meters	Available
2100357-4	2.0 meters	Available
2100357-5	2.5 meters	Available
2100357-6	3.0 meters	Available
2100357-7	4.0 meters	Available
2100357-8	5.0 meters	Available
2100357-9	7.5 meters	Available
1-2100357-0	10.0 meters	Available
1-2100357-1	12.5 meters	Available
1-2100357-2	15.0 meters	Available

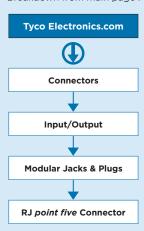
RJ *point five* Connector Documentation

Part Number	Description
108-2341	RJ point five Product Specifications (Design Objectives)
114-13228	RJ point five Receptacle Application Sheet
114-13235	RJ point five Plug Kit Application Sheet
408-10243	Cable Assembly Termination Instruction Sheet

e-Catalog:

www.tycoelectronics.com/products/rjpointfive

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FOR MORE INFORMATION

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Part numbers in this brochure are RoHS Compliant*, unless marked otherwise.

*as defined www.tycoelectronics.com/leadfree

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