RJ *point five* connector Double Density Gigabit Ethernet Connector Solution

PM: Roel van Lokven

RJ *point five* connector

RJ *point five* connector vs. RJ45

RJ *point five* connector is ½ the size of a RJ45

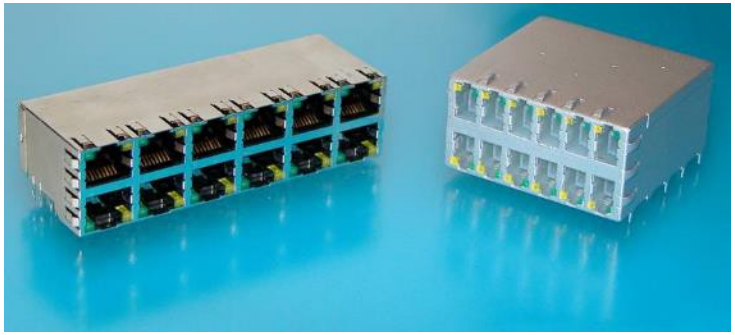
RJ *point five* connector

Product intended for 1 Gigabit applications where increased port density is required (will allow 10/100 as well)

Doubles the amount of standard RJ45 connections at the same real estate for board as well as panel

Next generation Ethernet Link

Road map incl. Cat 6a (10Gb/s)



RJ *point five* connector vs. RJ45

RJ *point five* connector

Potential Application: Data Center

Switching applications in wiring closets

Stackable switches

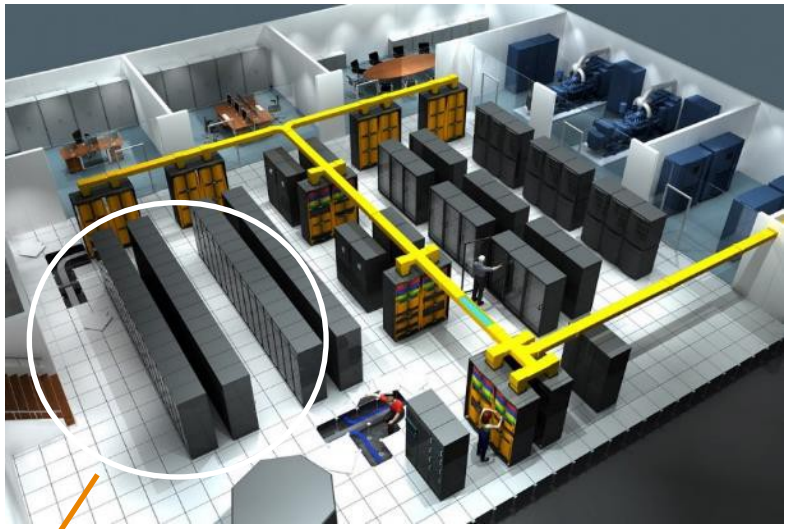
Top of server switching applications

High density Ethernet switching/routing products

Data center switching applications include top of rack, end of row, mid row

Server I/O applications

Wiring closet switching products



RJ *point five* connector Demo Box

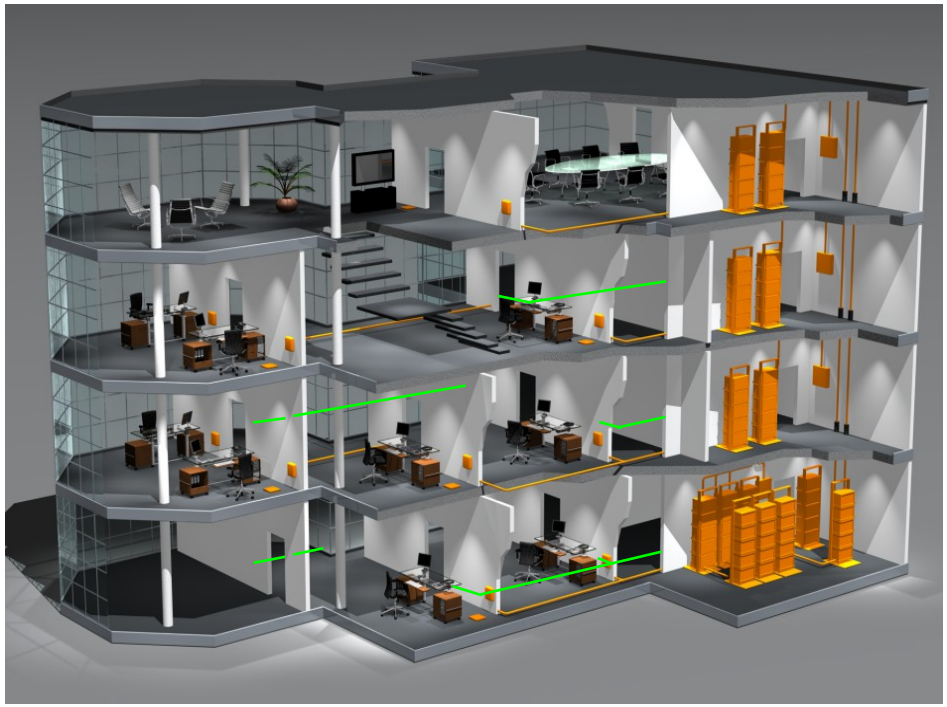
RJ *point five* connector

Potential Application: Data Center

High density I/O modules for router applications

Any application where increased port density is required

1:1 plug ratio allows to easily incorporate entire network with less real estate



RJ *point five* connector Features & Benefits

Key Features & Benefits

- Double the density of the standard RJ45 Ethernet link
- Cable assemblies capable of field termination
- Cable assemblies available as SF/UTP, F/UTP, UTP, all LszH, RoHS and UL listed
- Cable management features available from TE for higher density configurations
- Product family will support Gigabit speeds of Cat5e UTP, F/UTP and SF/UTP cable, and roadmap supports PoE+ and 10Gig over Cat6a

RJ *point five* connector Features & Benefits

Key Features & Benefits

- Ergonomic release to allow easy plug- extraction
- Receptacle is a modular design to allow for easy and rapid deployment of product extensions
- Improved LED visibility
- RoHS compliant
- UL approved
- IEC 61076-3-121

RJ *point five* connector Plug Assembly

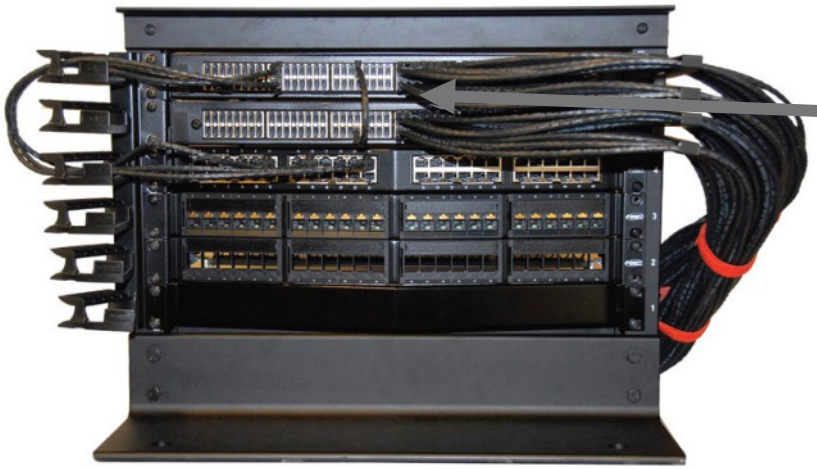
Release strap engages with RJ45 style latch

- Allows access in high density applications

Light pipe added thru cable boot to facilitate visual identification with high density front panel

TE also provides cable managements systems

Cable plug capable for field termination



RJ *point five* connector current Product offerings

RJ *point five* Board Mount Receptacles and Plug Kit				
Part Number	Description	Grounding finger	LEDs	Product Available
2057133-1	2x8 Receptacle	Yes	Yes (R/G)	Yes
2057133-2	2x8 Receptacle	Yes	Yes (Y/G)	Yes
2057134-1	2x12 Receptacle	Yes	Yes (R/G)	Yes
2057134-2	2x12 Receptacle	Yes	Yes (Y/G)	Yes
2057131-1	2x1 Receptacle	Yes	Yes (R/G)	Yes
2057131-2	2x1 Receptacle	Yes	Yes (Y/G)	Yes
2170129-1	1x2 Receptacle	Yes	*	Yes
2170185-1	Plug Kit shielded	--	--	Yes

* has lightpipes for board mounted LEDs

RJ *point five* current Product offerings

RJ *point five* to RJ *point five* Cable Assembly			
Cat5e U/UTP AWG 24	Cat5e F/UTP AWG 26 LszH	Cat5e F/UTP AWG 26 LszH (short boot)	
Partnumber	Partnumber	Partnumber	Cable length
2100356-1	2142758-1	2159683-1	0.5 meter
2100356-2	2142758-2	2159683-2	1.0 meter
2100356-3	2142758-3	2159683-3	1.5 meter
2100356-4	2142758-4	2159683-4	2.0 meter
2100356-5	2142758-5	2159683-5	2.5 meter
2100356-6	2142758-6	2159683-6	3.0 meter
2100356-7	2142758-7	2159683-7	4.0 meter
2100356-8	2142758-8	2159683-8	5.0 meter
2100356-9	2142758-9	2159683-9	7.5 meter
1-2100356-0	1-2142758-0	1-2159683-0	10.0 meter
1-2100356-1	1-2142758-1	1-2159683-1	12.5 meter
1-2100356-2	1-2142758-2	1-2159683-2	15.0 meter

RJ *point five* to RJ45 Cable Assembly			
Cat5e U/UTP AWG 24	Cat5e F/UTP AWG 26 LszH	Cat5e F/UTP AWG 26 LszH (short boot	
Partnumber	Partnumber	Partnumber	Cable length
2100357-1	2142759-1	2159684-1	0.5 meter
2100357-2	2142759-2	2159684-2	1.0 meter
2100357-3	2142759-3	2159684-3	1.5 meter
2100357-4	2142759-4	2159684-4	2.0 meter
2100357-5	2142759-5	2159684-5	2.5 meter
2100357-6	2142759-6	2159684-6	3.0 meter
2100357-7	2142759-7	2159684-7	4.0 meter
2100357-8	2142759-8	2159684-8	5.0 meter
2100357-9	2142759-9	2159684-9	7.5 meter
1-2100357-0	1-2142759-0	1-2159684-0	10.0 meter
1-2100357-1	1-2142759-1	1-2159684-1	12.5 meter
1-2100357-2	1-2142759-2	1-2159684-2	15.0 meter

RJ *point five* coupler		
Partnumber	Raw cable type	Cable length
2159658-1	Cat5e F/UTP AWG 26 LszH	0.25 meter
2159658-2	Cat5e F/UTP AWG 26 LszH	0.5 meter
2159658-3	Cat5e F/UTP AWG 26 LszH	1.0 meter

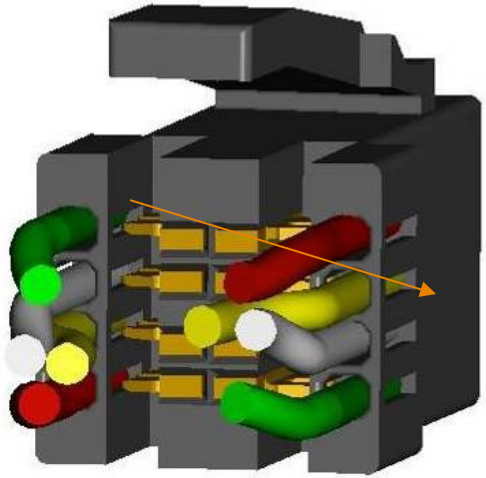
RJ *point five* documentation	
Partnumber	Description
108-2341	RJ *point five* Product Specifications (Design Objectives)
114-13228	RJ *point five* Receptacle Application Sheet
144-13235	RJ *point five* Plug Kit Application Sheet
408-10243	Cable Assembly Termination Instruction Sheet

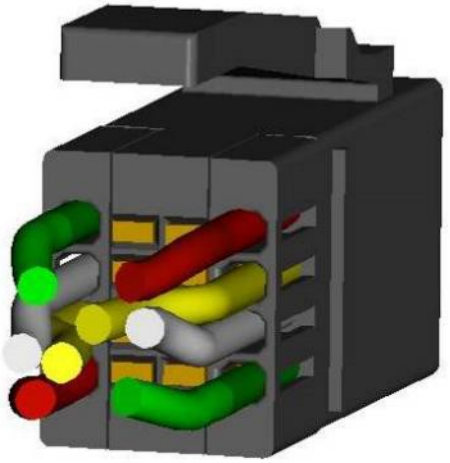
RJ*point five* coupler
TE Pn 2159658-x

With standard boot:
- 2100356/357
- 2142758/759

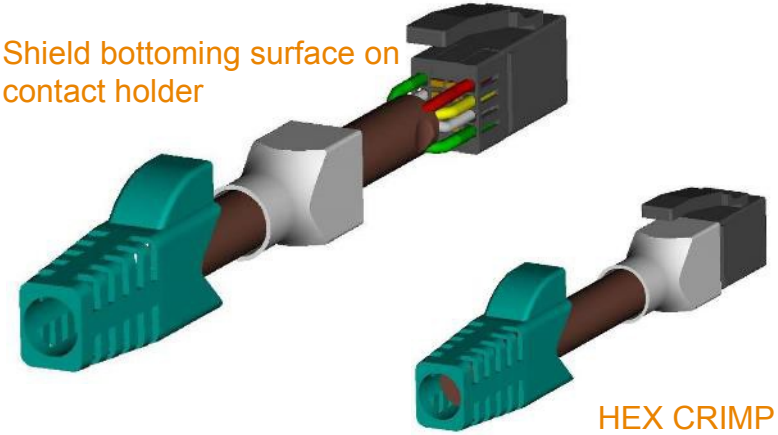
With short boot:
- 2159684/685

RJ *point five* connector Plug assembly, Field installable

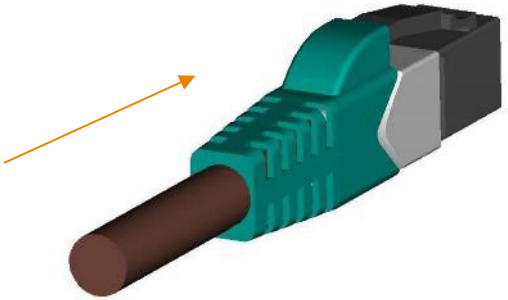




Shield bottoming surface on contact holder



HEX CRIMP AREA



Support Materials

Customer Drawings Online

http://dmtec.tycoelectronics.com/dmtec/index.jsp

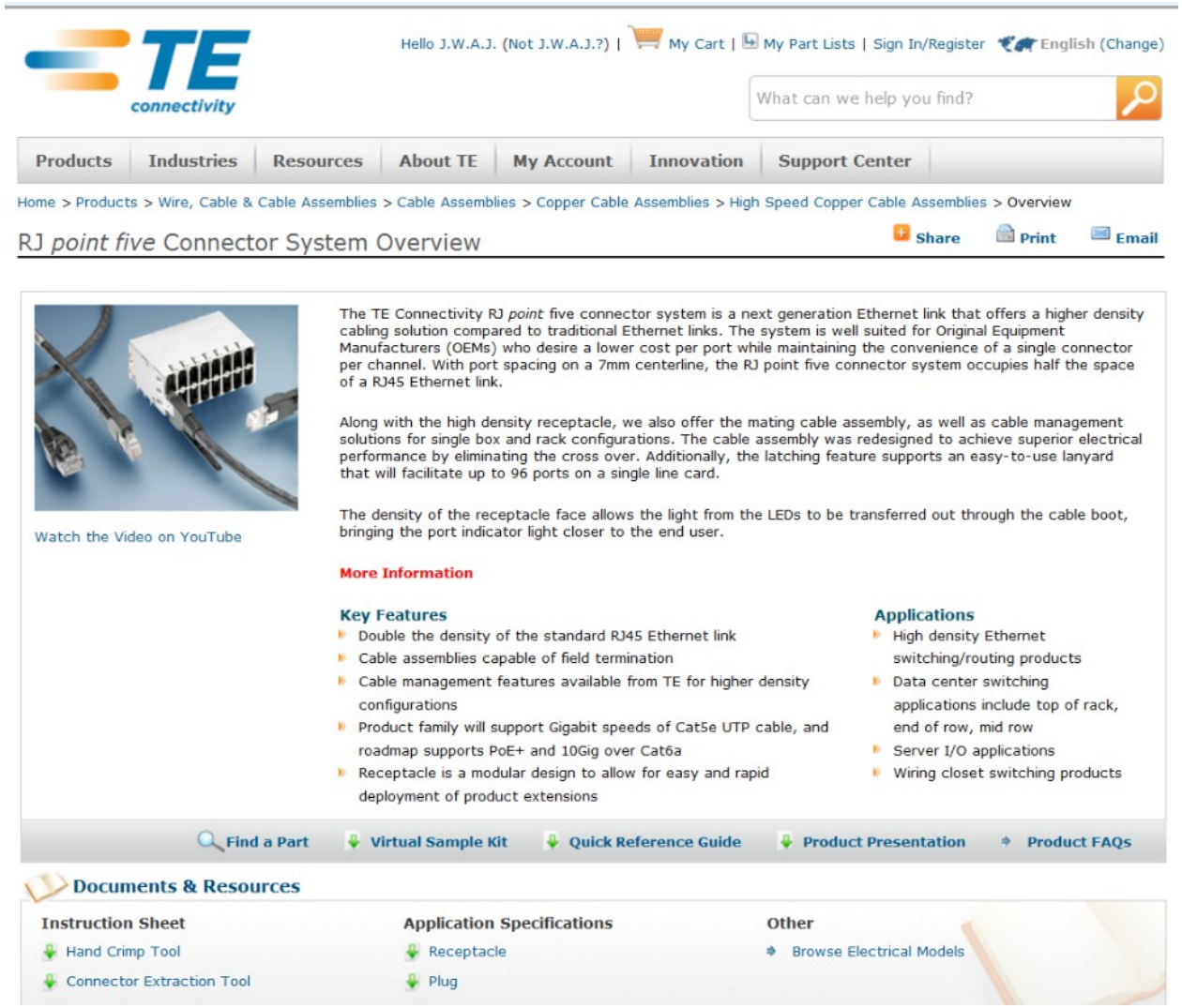
Quick Reference Guide Available

http://www.te.com/catalog/minf/en/712?BML=10576,22530,23026,23025,23027

Connector Documentation Numbers

- 108-2341
  - RJ *point five* connector 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
- SDE Hand Crimping Tool
  - 2031734-1

Support Materials



TE connectivity

Hello J.W.A.J. (Not J.W.A.J.?) | My Cart | My Part Lists | Sign In/Register | English (Change)

What can we help you find?

Products | Industries | Resources | About TE | My Account | Innovation | Support Center

Home > Products > Wire, Cable & Cable Assemblies > Cable Assemblies > Copper Cable Assemblies > High Speed Copper Cable Assemblies > Overview

RJ *point five* Connector System Overview

Share Print Email

Watch the Video on YouTube

The TE Connectivity RJ *point* five connector system is a next generation Ethernet link that offers a higher density cabling solution compared to traditional Ethernet links. The system is well suited for Original Equipment Manufacturers (OEMs) who desire a lower cost per port while maintaining the convenience of a single connector per channel. With port spacing on a 7mm centerline, the RJ point five connector system occupies half the space of a RJ45 Ethernet link.

Along with the high density receptacle, we also offer the mating cable assembly, as well as cable management solutions for single box and rack configurations. The cable assembly was redesigned to achieve superior electrical performance by eliminating the cross over. Additionally, the latching feature supports an easy-to-use lanyard that will facilitate up to 96 ports on a single line card.

The density of the receptacle face allows the light from the LEDs to be transferred out through the cable boot, bringing the port indicator light closer to the end user.

More Information

Key Features

- Double the density of the standard RJ45 Ethernet link
- Cable assemblies capable of field termination
- Cable management features available from TE 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

Applications

- High density Ethernet switching/routing products
- Data center switching applications include top of rack, end of row, mid row
- Server I/O applications
- Wiring closet switching products

Find a Part | Virtual Sample Kit | Quick Reference Guide | Product Presentation | Product FAQs

Documents & Resources

Instruction Sheet	Application Specifications	Other
Hand Crimp Tool	Receptacle	Browse Electrical Models
Connector Extraction Tool	Plug	

TE connectivity

Support Materials

RJ point five CONNECTOR SYSTEM

Quick Reference Guide

TE Connectivity's (TE) next-generation Ethernet link, the RJ *point five* connector, offers higher density cabling solutions for Original Equipment Manufacturers (OEMs) who desire a competitive total cost of ownership per port -while maintaining the granularity of a single connector per channel. The port spacing is on a 7mm centerline, occupying half the space of a traditional RJ45 Ethernet link.

In addition to the high-density receptacle, TE offers the mating cable assembly along with cable management solutions for single-box and rack configurations. The receptacle and cable assembly were redesigned to eliminate the undesirable RJ45 split-pair configuration, which leads to heightened electrical performance. Additionally, the latching feature incorporates an easy-to-use lanyard that facilitates 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
- Receptacle is a modular design to allow for easy and rapid deployment of product extensions
- Lower total cost of ownership per port
- Offers field installations on cable assemblies, providing an option vs. factory terminated solutions
- Doubles density of gigabit ports in the same real estate; increases network capacity 100%
- Cable assemblies capable of field termination
- Cable management features available from for higher density configurations
- Product supports gigabit speeds of Cat5e U/UTP and Cat5e F/UTP stranded (tinned) cable

DATA AND DEVICES /// RJ *point five* CONNECTOR SYSTEM

FAQs

How to identify customers that may be interested?

- Focus is enterprise and data center or any customer who consumes stacked or ganged RJ45 modular and mag jacks

What are the unique selling points?

- Increased density without compromising access or LEDs
- Field termination capable
- IEC document: IEC 61076-3-121

Second source manufacturers?

- Bell Stewart licensed to market, manufacture, and sell

Customers who have adopted?

- Design wins with several OEM, doubled revenue in 2014

"RJ point five, TE Connectivity, TE and TE connectivity (logo) are trademarks of the TE Connectivity Ltd. family of companies."