

Part Number: PL- RJ45ST7

PLANET RJ45ST7 is a shielded 8P8C RJ45-form-factor field-termination plug for compatible Category 7 S/FTP copper cable. Its toolless close-and-lock termination system eliminates the need for a conventional modular-plug crimp tool, while the fully shielded metal housing provides a conductive path for cable-screen continuity when correctly prepared and terminated.

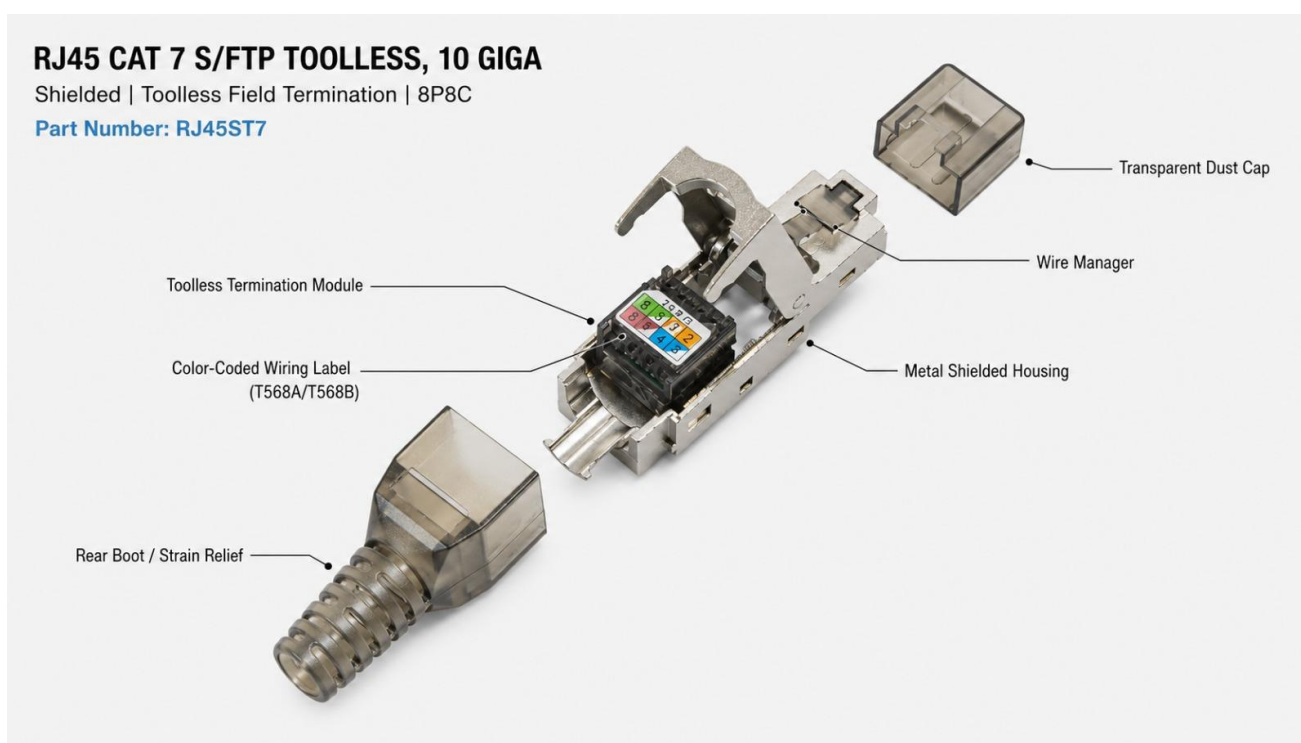
The PLANET configuration uses 15 µin hard-gold plating on the RJ45 mating contact area as standard, with 30 µin and 50 µin available as optional upgrades. The connector is intended for Category 7 / Class F transmission performance up to 600 MHz and 10GBASE-T application support; final component or channel compliance should be supported by applicable IEC 60603-7-7 test evidence for the actual connector-and-cable combination.

S/FTP Shielded Plug	15 µin Gold Standard	600 MHz Category 7	TOOLLESS 10 Gigabit
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"Toolless Termination. 600 MHz Performance. 10 Gigabit Ready."

1. General Description

PLANET RJ45ST7 is a fully shielded, toolless 8P8C field plug intended for termination of four-pair Category 7 S/FTP installation cable. The plug combines a metal shielding enclosure, insulated conductor-management body, color-coded T568A/T568B positioning guide and a close-and-lock termination mechanism. Correct bonding of the cable braid/foil and drain arrangement to the connector housing is essential for shield continuity and high-frequency performance.



CAT7 S/FTP Toolless RJ45 Connector - Annotated View

2. Construction

Parameter	Specification
Product Type	Category 7 S/FTP shielded toolless RJ45 field-termination plug
Part Number	RJ45ST7
Interface	Shielded 8P8C male modular plug / RJ45-form-factor field plug
Housing	Fully shielded metal enclosure with insulated conductor-management body
Termination Method	Toolless close-and-lock field termination; no conventional RJ45 crimp tool required
Contact System	8 copper-alloy contacts with selective hard-gold plated mating area
Gold Contact Plating	15 µin hard gold standard; 30 µin and 50 µin optional
Wiring Scheme	T568A and T568B conductor positioning / color-code support
Shield Termination	360° conductive termination of compatible S/FTP braid/foil screen when correctly prepared
Cable Compatibility	Category 7 S/FTP installation cable; qualified conductor O.D., insulation O.D. and overall cable O.D. per approved production drawing

TECHNICAL SPECIFICATIONS

CAT7 S/FTP TOOLLESS RJ45 | RJ45ST7

3. Electrical Characteristics

Parameter	Specification
Frequency Range	1-600 MHz Category 7 / Class F performance target
Contact Resistance	≤ 20 mΩ initial interface contact resistance, IEC 60603-7 reference
Insulation Resistance	≥ 500 MΩ, IEC 60603-7 reference
Voltage Proof - Contact to Contact	1000 V DC or AC peak, IEC 60603-7 reference
Voltage Proof - Contacts to Shield	1500 V DC or AC peak, IEC 60603-7 reference
Shield Continuity	Conductive S/FTP cable-screen-to-plug-housing path when correctly terminated
PoE / PoE+ / 4-Pair PoE support subject to qualified cable, contact resistance and installed-channel thermal design	

4. Mechanical Characteristics

Parameter	Value
Mating Durability	≥ 750 mating cycles, IEC 60603-7 performance-level reference
Housing / Shield	Robust metal shielding enclosure with integral RJ45 locking latch
Termination Construction	Toolless close-and-lock field termination with conductor-management guide
Strain Relief	Integrated rear cable clamp / strain-relief assembly
Cable Fit	Conductor size, insulation diameter and cable O.D. to be confirmed against the qualified production drawing

5. Technical Performance

RJ45ST7 is designated as a Category 7 shielded toolless field plug for S/FTP cable and 10 Gigabit Ethernet applications. Category 7 / Class F connectivity operates to 600 MHz under ISO/IEC 11801-1, while IEC 60603-7-7 specifies 8-way shielded connector transmission requirements to 600 MHz. Final project compliance should be supported by applicable component or installed-channel verification for the actual connector, cable construction and termination method.

Performance Item	Requirement	Performance Item	Requirement	Application	Requirement	Status
Frequency Range	1-600 MHz	Insertion Loss / NEXT	Cat.7 compliant when verified	1000BASE-T	Supported	Baseline
Shield Continuity	End-to-end conductive path	Return Loss / FEXT	Cat.7 compliant when verified	10GBASE-T	Supported in compliant Class F channel	Application
Category / Class	Cat.7 / Class F	TCL / TCTL / Balance	Per IEC 60603-7-7 when verified	PoE / PoE+ / 4PPoE	Supported*	Application
Wire Map	8P8C correct	Toolless Termination	Close-and-lock / no crimp tool	T568A / T568B	Supported	QA

* Remote powering depends on compatible conductor size, contact resistance, termination quality, cable temperature and installed-channel design. Category 7 / 600 MHz performance is not established by shielding or product naming alone and should be verified on the qualified connector-and-cable combination.

APPLICATIONS, FEATURES & COMPLIANCE

CAT7 S/FTP TOOLLESS RJ45 | RJ45ST7

6. Applications

- Category 7 S/FTP shielded copper cable field termination
- 10 Gigabit Ethernet (10GBASE-T) in a compliant Class F channel
- Toolless field termination where conventional RJ45 crimping is impractical
- Data centers, enterprise networks and high-bandwidth structured cabling
- IP CCTV, VoIP, wireless access points and high-speed network devices
- EMI/RFI-sensitive installations using correctly bonded shielded channels
- PoE / PoE+ / 4-Pair PoE devices subject to qualified remote-power and thermal design

7. Transmission & Shielding Performance

- Category 7 / Class F transmission target up to 600 MHz
- Supports 10/100/1000BASE-T and 10GBASE-T applications in a compliant installed channel
- IEC 60603-7-7 defines transmission requirements for 8-way shielded Category 7 connectors up to 600 MHz
- Fully shielded metal housing supports cable-screen continuity; toolless close-and-lock termination removes the need for a conventional crimp tool

8. Key Features

- 8P8C fully shielded toolless field-termination modular plug
- Category 7 / Class F performance target up to 600 MHz; 10 Gigabit application support
- 15 µin hard-gold contact plating as standard
- 30 µin and 50 µin hard-gold plating available as optional upgrades
- Metal shield housing with insulated conductor-management body
- Toolless close-and-lock termination with T568A/T568B conductor guide
- Designed to maintain S/FTP braid/foil screen continuity when correctly terminated

9. Standards Compliance

Standard / Certification	Status
ISO/IEC 11801-1	Category 7 / Class F cabling reference up to 600 MHz
IEC 60603-7-7:2010	8-way shielded connector reference for data transmission up to 600 MHz; compliance requires supporting test evidence
IEC 60603-7-1	Base dimensional, mechanical, electrical and environmental connector requirements
IEEE 802.3an	10GBASE-T application support in a compliant installed channel
IEEE 802.3af / 802.3at / 802.3bt	PoE application support subject to qualified cable, contact resistance and thermal design
RoHS / REACH	Subject to applicable production declarations

QUALITY, OPTIONS & WARRANTY

RJ45ST7 | CAT7 S/FTP TOOLLESS 10G

10. Quality Assurance

Manufactured under controlled quality procedures to ensure:

- Consistent 8P8C contact alignment and toolless termination geometry
- Reliable metal shield closure, cable clamp retention and cable-screen continuity
- Controlled hard-gold plating thickness according to the ordered configuration

Validation: Production inspection should include housing and latch integrity, conductor seating, wire-map / continuity, shield-continuity, contact-resistance verification, plating-thickness inspection and dimensional checks. Category 7 / 600 MHz claims should be supported by applicable IEC 60603-7-7 component or installed-channel test evidence for the qualified connector-and-cable combination.

11. Gold Plating Options

- Standard: 15 µin (0.38 µm) hard gold over nickel on the RJ45 mating contact area
- Optional upgrade: 30 µin (0.76 µm) hard gold over nickel
- Premium option: 50 µin (1.27 µm) hard gold over nickel
- Increased gold thickness improves corrosion resistance and contact-surface durability but does not by itself establish Category 7 transmission compliance

12. Warranty

25-Year System Warranty

Subject to proper installation, use of approved PLANET system components and applicable warranty terms.

Packing 1pc / PE bag

BOX	50 PCS
Carton	500 PCS