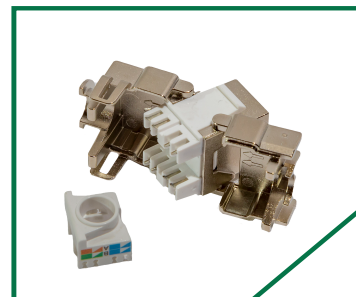
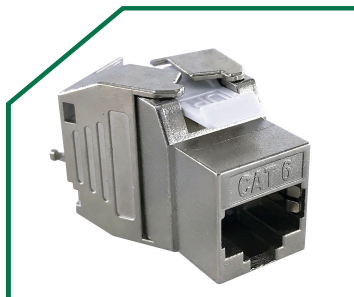


Cat.6 STP Toolless Keystone Jack 180°

Part Number:

PL-KE6STL



FEATURES

- Category 6 shielded toolless keystone jack, 180° cable entry, intended for 1 to 250 MHz shielded channel applications.
- Compatible with S/FTP shielded cabling when cable diameter, pair-screen handling and overall shield termination follow the approved production drawing.
- Supports T568A and T568B wiring with a color-coded IDC termination cap.
- Toolless termination provides strain relief, bend-radius control and secure cable retention; the IDC profile is 110-compatible where permitted by the approved installation instruction.
- Accepts 23&24 AWG solid or stranded copper conductors ; CCA and CCS conductors are not accepted.
- High-impact polycarbonate internal housing with UL 94 V-0 material rating and an external metal shielding enclosure.
- RJ45 mating contacts use nickel underplate and gold plating: 15 microinch standard; 30 or 50 microinch optional.
- Minimum 750 plug insertion/removal cycles and lead-free, RoHS-compliant IDC finish.
- Category 6 transmission and shield-continuity performance shall be confirmed for the released PL-KE6STL configuration.

APPLICATIONS

- 1000BASE-T, 100BASE-TX and 10BASE-T Ethernet
- Voice and IP telephony
- 2.5GBASE-T and 5GBASE-T when the complete installed channel is validated
- Limited-distance 10GBASE-T only when the installed Cat.6 channel is qualified for the application
- IEEE 802.3 PoE applications subject to complete-channel current and thermal verification

REFERENCE STANDARDS

- ANSI/TIA-568.2-E - Category 6 balanced twisted-pair cabling and components
- ISO/IEC 11801-1:2017 (including Amd 1:2025 and its Cor 1:2025) - Category 6 / Class E
- EN 50173-1:2018 - Category 6 / Class E generic cabling
- IEC 60603-7-5:2010 - Shielded 8-way connectors up to 250 MHz
- TIA TSB-5021 - Installed Category 5e/6 assessment for 2.5GBASE-T and 5GBASE-T
- TIA TSB-155-A - Installed Category 6 assessment for 10GBASE-T
- IEEE 802.3-2022 + Cor 1:2024 - Ethernet and remote-powering application compatibility
- IEC 60512-99-002:2022 + Amd 1:2025 - PoE unmating endurance under electrical load

GOLD PLATING CONFIGURATION

STANDARD	OPTION	OPTION
15 microinch 0.38 micrometre	30 microinch 0.76 micrometre	50 microinch 1.27 micrometre

CHARACTERISTICS

Property	Specification
Category / bandwidth	Category 6 connecting hardware; 1-250 MHz; shielded channel use
Shielding interface	External metal enclosure for 360° shield continuity; alloy, finish, screen termination and bonding interface shall follow the approved production drawing
RJ45 / IDC housing	High-impact polycarbonate (PC), UL 94 V-0 material rating
RJ45 contact material	Phosphor bronze with 50-60 microinch (1.27-1.52 micrometre) nickel underplate
Gold-plated contact area	RJ45 mating-contact area only: minimum 3 mm contact length; 15 microinch (0.38 micrometre) gold standard
Optional gold plating	RJ45 mating-contact area: 30 microinch (0.76 micrometre) or 50 microinch (1.27 micrometre), available as options
IDC terminal	Phosphor bronze, nickel underplate and lead-free tin finish; 110-compatible IDC profile subject to the approved installation instruction
Cable compatibility	23&24 AWG solid or stranded copper conductors ; CCA/CCS excluded; construction, insulation diameter and overall cable diameter per approved drawing
Wiring scheme	T568A and T568B color coding
Insertion force	Maximum 8.8 N (approximately 900 gf) for 8 contacts
Plug retention	Minimum 75.5 N (approximately 7.7 kgf) between jack and compatible plug
Operating temperature	-30°C to +70°C
RJ45 durability	Minimum 750 mating cycles; contact resistance checked at defined test intervals
IDC durability	Up to 200 termination-cap operations, subject to post-cycle electrical verification
Component qualification	Independent component report to ANSI/TIA-568.2-E and IEC 60603-7-5 through 250 MHz; test setup, samples, limits and PASS margins identified
Electrical verification	Released report shall state rated voltage/current and measured contact-resistance, insulation-resistance and dielectric-strength results
Environmental	RoHS-compliant materials; lead-free IDC plating

MANDATORY CAT.6 CABLE / LINK VALIDATION

Complete-cable / installed-link check	Required record
DC loop resistance at 20°C	Maximum 18.76 ohm/100 m (9.38 ohm/100 m per conductor)
Mutual capacitance at 1 kHz	Maximum 5.6 nF/100 m
Propagation delay	Maximum 538 ns/100 m; record test frequency and configuration
Delay skew	Maximum 45 ns/100 m

PL-KE6STL RELEASE CONTROLS

Control	Required release evidence
Transmission performance	Independent component report through 250 MHz covering insertion loss, return loss, NEXT, FEXT/ACR-F and applicable power-sum parameters; identify test setup, samples, limits and worst-case PASS margins.
Shield continuity	Verify 360° continuity from the cable overall shield through the jack enclosure to the shielded plug and patch panel; handle individual pair foils according to the released termination instruction.
Bonding interface	Record enclosure material/finish, screen-contact method and the approved grounding/bonding path; shielding shall not be presented as a substitute for correct bonding.
Electrical integrity	Released electrical report shall state contact resistance, insulation resistance, dielectric strength and rated voltage/current using identified test methods.
Cable / mechanical interface	Approved drawing shall define permitted 24 AWG copper construction, conductor and insulation diameters, overall cable diameter, keystone tolerances, faceplate/patch-panel compatibility and strain relief.
Remote powering	Where PoE is claimed, verify resistance unbalance, current-carrying capacity, temperature rise and unmating under electrical load for the released connector and complete shielded channel.
Ordering traceability	Ordering codes and reports shall distinguish the standard 15 microinch contact finish from the optional 30 and 50 microinch versions.

COMPLIANCE NOTES

- Gold thickness applies to the RJ45 mating-contact area only; the IDC uses a separate lead-free tin finish over nickel.
- 2.5GBASE-T, 5GBASE-T, limited-distance 10GBASE-T and PoE support depend on the validated complete installed channel and are not standalone keystone ratings.
- Shield continuity and bonding effectiveness shall be verified using the approved shielded cable, plug, patch panel and grounding method.
- UL 94 V-0 identifies the flammability rating of the plastic material; it does not by itself represent a UL product listing.
- Shielding can improve noise immunity but does not change the Category 6 / Class E performance limits.
- Category 6 compliance applies only to the released PL-KE6STL construction represented by the approved drawing and matching test report.

PERFORMANCE DOCUMENTATION: Detailed electrical performance test reports and compliance documentation for the released product configuration are available upon request.

Packing 1pc / PE bag

BOX	50 PCS
Carton	500 PCS