

OPTICAL CONNECTORS

LC/UPC Connector

Model [PSK-CON-101](#) · PROSKY passive network infrastructure

Small-form-factor LC connector with a 1.25 mm zirconia ferrule for high-density single-mode termination. Epoxy-and-polish construction for pigtails, patch cords and factory assemblies, at half the panel footprint of SC.

Product overview

The LC/UPC Connector is the small-form-factor workhorse of dense optical plant: an RJ-style latching body holding a 1.25 mm zirconia ferrule — half the diameter of SC — so twice the terminations fit in the same panel space. The kit comprises the latched housing, ferrule-and-flange assembly, crimp components, strain-relief boot and dust cap, in builds for 0.9 mm buffered fiber and 2.0/3.0 mm jacketed cable.

As an epoxy-and-polish connector, termination follows the classic factory sequence: the fiber is bonded into the ferrule with heat-cured epoxy, cleaved, and polished to an ultra-physical-contact dome. The controlled UPC geometry — end-face radius, apex offset and fiber height — is what delivers repeatable low insertion loss and 50 dB-class return loss over hundreds of mating cycles. The design suits high-volume assembly houses and pigtail production, where polish quality is verified by interferometer as a matter of routine.

In the network, LC dominates wherever density matters: distribution-frame adapter fields, high-count panel terminations, and the duplex interfaces of optical transceivers in switches and OLTs. A duplex clip joins two connectors for Tx/Rx pairing, and tuned-ferrule variants are available where tighter loss distribution is specified.

Key features

- › Small form factor: 1.25 mm ferrule doubles port density versus SC
- › Zirconia (ZrO₂) ferrule with ultra-physical-contact polish geometry
- › RJ-style latch gives positive engagement with fingertip release
- › Epoxy-and-polish construction for controlled factory termination
- › Builds for 0.9 mm buffered fiber and 2.0 / 3.0 mm jacketed cable
- › Duplex clip option for transceiver Tx/Rx pairing
- › Typical insertion loss ≤ 0.3 dB; return loss ≥ 50 dB as a class

Applications

- › High-density panel termination
- › Pigtail and patch-cord assembly
- › Transceiver duplex interfaces
- › Distribution-frame adapter fields
- › Enterprise and data-center cabling

Network types: Data center, Enterprise

Technical specifications

Typical values for this product class — request the certified PROSKY datasheet for guaranteed figures.

Optical	
Insertion loss	≤ 0.3 dB (typical 0.15 dB)
Return loss (UPC)	≥ 50 dB
Operating wavelength	1260 – 1625 nm
Durability	≥ 500 matings, ΔIL ≤ 0.2 dB
Mechanical	
Ferrule	Zirconia (ZrO ₂), 1.25 mm
Housing	Thermoplastic, RJ-style latch
Cable retention	≥ 50 N (jacketed builds)
Termination	Epoxy and polish
Compatibility	
Fiber	Single-mode 9/125 μm
Cable builds	0.9 mm buffer / 2.0 mm / 3.0 mm jacket
Duplexing	Clip-on duplex holder
Color convention	Blue housing (UPC)
Environmental	
Operating temperature	–40 °C to +75 °C
Storage temperature	–40 °C to +85 °C

Standards alignment

- › Designed to align with IEC 61754-20 (LC interface)
- › Designed to align with IEC 61755 (optical connection performance)
- › Designed to align with Telcordia GR-326 (single-mode connectors)

Standards are named as design-alignment references for this product class, not as certifications held.

Packaging

Typical export packaging: connector kits of 100 pieces per bag with dust caps fitted, 10 bags per inner carton, consolidated in export master cartons. Bulk and kitted configurations per order.

Ordering & contact

Specify model PSK-CON-101 with your required configuration (fiber count, length, termination or format options as applicable). For project engineering support, certified figures and commercial terms, contact PROSKY via proskytele.com.