

# L-JACK™ FIBER OPTIC CONNECTOR



## Ruggedized LC Connector for Harsh Environment Applications



### Overview

OCC introduces L-JACK™, a robust fiber optic duplex LC connector that couples the small form factor of traditional LCs with the known ruggedness of OCC harsh environment connectors. OCC's L-JACK connector is designed for environmentally challenging situations and offers easy installation with proven optical performance. Available in a broad range of configuration possibilities, the L-JACK is ideal for installations in extreme mobile environments, industrial applications, and any install that requires excessive fiber optic protection.



### Features & Benefits

Conventional fiber optic connectors were never intended for, or able to withstand, the rough handling of deployable and harsh applications. With the OCC L-JACK fiber optic connector, users can expect:

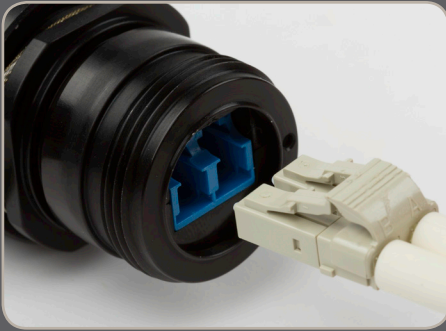
- **Unsurpassed ruggedized connector design.** OCC's L-JACK is manufactured with optimum metal materials that can withstand wide temperature ranges and provide extreme impact resistance, unlike the competition's polymer versions. The L-JACK's robust design is ideal for almost any harsh environment application where survivability is a factor. Multiple plating options complement the resilient nature of this connector to reinforce its mechanical performance.
- **Superior optical performance.** Compliant with IEC 61540-20, Telecordia GR-326, and TIA/EIA-604-10-A standards, the L-JACK connector accommodates standard LC and is available in multimode, single-mode and single-mode APC polish. The threaded coupling ensures proper fiber alignment and reinforces positive mating of the LC connector to the receptacle.
- **IP-68 environmental sealing.** OCC's L-JACK prevents dirt and moisture from deterring optical connections and protects the duplex LC connector from harsh environments where mud and water are present.
- **Specialized strain relief for intense tensile loading.** When terminated with OCC's Distribution or Breakout style cables, the L-JACK back shell enables up to 400 pounds of pull strength allowing the fiber cable to withstand intense tensile loading through difficult hauls.
- **Variety of configurations to fit any application need.** Once terminated, the L-JACK plug with back shell is then used to interconnect with a variety of L-JACK receptacles, including flange-mount, jam-nut and D38999 jam-nut form receptacles.

### Applications

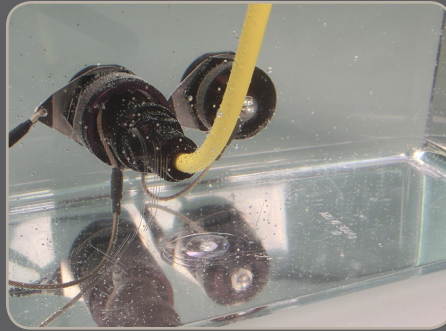
- CATV, LAN, WAN, and PONS
- Telecommunications
- Remote Radio Heads (RRH)
- Data Center and Processing Networks
- Fiber-to-the-X (FTTC, FTTH, FTTD)
- Deployable Mobile Systems

While there are many similar types of connectors on the market, only the OCC L-JACK can bring proven durability and performance to deployable and harsh environment communications. Ideal for quick equipment connections, the L-JACK fiber optic connector is a logical choice for reliable communications networks.

## Features & Benefits



L-JACK receptacles are designed to accommodate standard LC/UPC and LC/APC duplex jumpers that have been manufactured in accordance with IEC-61540-20, Telcordia GR-326 and TIA/EIA-604-10-A connector standards.



All L-JACK receptacles and plugs provide an IP-68 compliant seal and pass IEC-60529 standards for water submersion and dust testing.



Specialized strain relief supports 400 lbs of tension strength and provides superior cable performance compared to commercial options when utilized with OCC Distribution or Breakout style cables.



L-JACK in-line receptacles provide the ability to "daisy-chain" duplex assemblies.



L-JACK offers a variety of plug and receptacle options including flange-mount, and jam-nut options.



L-JACK can be ordered as a component or as factory terminated cable assemblies provisioned with L-JACK plugs and receptacles or other OCC connector options. Contact OCC Sales for additional ordering information.

## Performance Specifications

PARAMETER	SPECIFICATION	PERFORMANCE
Insertion Loss (IL) (UPC)	EIA/TIA-455-171	Typical 0.25dB, Max 0.5dB
Return Loss (RL) (UPC)	EIA/TIA-455-107A	Min. 50dB
Operational Temperature	EIA/TIA-455-5C	-40°C to 85°C
Storage Temperature	EIA/TIA-455-5C	-40°C to 85°C
Temperature Humidity Cycling	EIA/TIA-455-5C	-40°C to 71°C at 95%RH, 240 hrs
Dust test	IEC 60529 IP68	8 hrs dust exposure with 20 mbar
Water Submersion	IEC 60529 IP68	48 hrs immersion /1 M water
Cable Retention <sup>1</sup>	EIA/TIA-455-6	400 lbs for 10 minutes
Mating durability	EIA/TIA-455-21	500 cycles
Impact	EIA/TIA-455-2C	8 drops, 2.4m
Vibration	EIA/TIA-455-11	10-55Hz, 2hr/axis, 3 axis
Mechanical shock	EIA/TIA-455-14A	Condition C, 5 shocks/axis
Crush	EIA/TIA-455-26A	450 lbs

Note:

1 Application of OCC D-002CSLS5KM during test



L-JACK internal jam-nut receptacle



L-JACK in-line receptacle

## Ordering Information

### L-JACK PLUG OPTIONS

PART NUMBER	CONFIGURATION
RLRB121LP01A	Plug, dust cap, short body, (2) LCs, beige, MM
RLRB121LP02B	Plug, dust cap, short body, (2) LCs, blue, SM
RLRB121LP02E	Plug, dust cap, short body, (2) LCs, green, SM/APC
RLRM121LP01A	In-line receptacle with back shell, dust cap, short body, (2) LCs, beige, MM
RLRM121LP02B	In-line receptacle with back shell, dust cap, short body, (2) LCs, blue, SM
RLRM121LP02E	In-line receptacle with back shell, dust cap, short body, (2) LCs, green SM/APC

### L-JACK RECEPTACLE OPTIONS

PART NUMBER	CONFIGURATION
RLRD121LC01A	Receptacle, flange-mount, dust cap, beige, MM
RLRD121LC02B	Receptacle, flange-mount, dust cap, blue, SM
RLRD121LC02E	Receptacle, flange-mount, dust cap, green, SM/APC
RLRK121LC01A	Receptacle, jam-nut, dust cap, beige, MM
RLRK121LC02B	Receptacle, jam-nut, dust cap, blue, SM
RLRK121LC02E	Receptacle, jam-nut, dust cap, green, SM/APC

**Note:**

Black Anodized is standard. Other plating options such as Nickel Teflon are available. Consult your local OCC representative for more information.

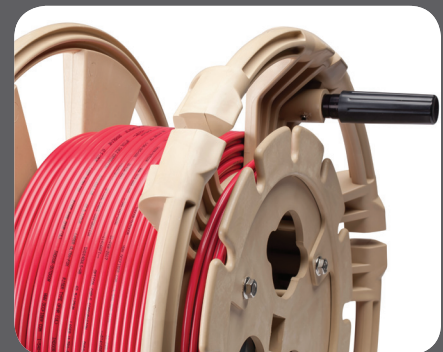
## Product Options for a Complete L-JACK Solution



Standard LC Patchcord



NEMA 4X Enclosures



Deployable Reels