

## Features:

- Rugged all metal design replaces plastic LC connector with deflectable tab
- Secure interface useful for high shock and vibration applications
- Separable for repair of fiber jumper to box/LRU level connector
- Supports standard or short strain relief boots
- Excellent Insertion and Return Loss
- Can be terminated on 1.6mm to 2.2mm diameter fiber cables or 900µm buffered fiber
- · Flush with top of LC receptacle
- Metric threaded secure Torx T5 screw
- Designed and tested to operate in humid environments
- Improved tamper resistance vs. plastic tab LCs
- For use in COTSWORKS Transceivers

LC-Rugged ™ is ideal for harsh environments, especially military and aerospace applications.













COMMERCIAL AEROSPACE

MILITARY AEROSPACE

MILITARY TACTICAL

SUBSEA NETWORKING

RADAR & SENSING

OIL & EXPLORATION

# **General Description**

The LC Rugged<sup>TM</sup> (LC-R) is an all-metal construction LC connector with a latching screw system that offers a highly reliable and separable interface. Standard plastic LCs can sag over time and temperature while the LC Rugged<sup>TM</sup> offers a more secure metal connection. Designed to MIL-STD, TIA, and ARINC 801 environmental performance, the patented retention mechanism offers excellent connector retention in extreme environments. LC-R insertion loss averages 0.06dB using an 850nm VCSEL light source. The LC-R can be ordered as part of a cable assembly or a fully integrated solution as part of a pigtailed transceiver assembly.

# **Specifications**

#### **Mechanical Specifications**

- Color coded to meet aerospace specifications
- Standard cable retention exceeds 15.00lbf
- Connector retention exceeds EIA-364-38B

## **Configuration Specifications**

- Multimode version Beige boot
- Singlemode version Blue boot
- Contact COTSWORKS for different boot options

#### **Environmental Specifications**

- Operating temperature of –50°C to +95°C
- Storage temperature –55°C to +105°C
- Humidity 95% (non-condensing)
- Mechanical shock per MIL-STD-883 (1,500g, 0.5ms)
- Vibration per MIL-STD-883 (20g)

#### Agency/Safety Specifications

• RoHS requirements per 6/6

#### Installation Guidelines

- Use 12 in.-oz installation torque on Torx T5 screw
- Threadlock adhesive recommended for high shock and vibration environments
- Connector available as part of a cable assembly or as termination kit





## **Ordering Information**

LC-R	-X	-XXX
	-M: Multimode	Blank: Connector Only
Product Family	-S: Single-mode	-1D8: Termination Kit for 1.6mm to 2.2mm
	-Q: 100/140 Multimode	-900: Termination Kit for 900µm Buffered Fiber

**Example part number:** LC-R-M-1D8 [A multimode LC-R Termination Kit for 1.6mm to 2.2mm Jacketed Fiber] **Example part number:** LC-R-S [A single-mode LC-R Connector]

Contact COTSWORKS for mechanical dimensional information and other configuration options.

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