

CMX-X1Q Single Mode Datasheet

These tactical Complex assemblies feature QPC's QMini Expanded Beam Fiber Optic Connectors, designed to meet the requirements of MIL-DTL-83526/20 Military Specifications. Designed for harsh environments, Expanded Beam fiber optic connectors use non-physical contact fiber optic termini that are fully sealed behind an anti-reflective coated ball lens. By expanding the beam to a large size, this lens enhances optical alignment and minimizes dust, debris, vibration, and other environmental effects. Since the optical surfaces/end faces of the termini do not wear during use, the QMini connector is incredibly durable, with more than 3,000 mating cycles. Available in 2 or 4 Channels, and a variety of lengths.

Features:

- 2 Channel/4 Channel Single Mode Hermaphroditic Expanded Beam Connector System
- Rubber Grip Plugs
- Intermateability: Neutrik FIBERFOX, Tyco Pro Beam Jr., Amphenol TACBeam, Glenair GMA, Stratos HMA, Fibreco Junior, DiGiCo Compatible
- Sealed to IP68 Rating
- Lightweight MIL-Tactical Cable Ideal for use in Harsh Environments Where Deployment and Retrieval for Reuse are Required



CMX-X1Q02S



CMX-X1Q02SR



CMX-X1Q04S



CMX-X1Q04SR

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Specifications:

Camplex SM-TAC4 Fiber:

- **Fiber Type:** Bend Tolerant Single Mode
- **Core/Cladding Diameter (μm):** 9/125
- **Wavelength (nm):** 1310/1550
- **Maximum Cabled Attenuation (dB/km):** 0.4/0.4
- **Primary Coating Diameter (μm):** 245
- **Secondary Coating Diameter (μm):** 900
- **Zero Dispersion Slope (ps.nm²-km):** 0.092
- **Proof Test Level (kpsi):** 100
- **Jacket Material:** Polyurethane
- **Buffer Material:** Hard Elastomeric
- **Cable Diameter:** 0.22in (5.5mm)
- **Impact Resistance:** 1,500 Impacts
- **Crush Resistance:** 1,800 N/cm
- **Max Tensile Load:**
 - Installation: 1,800 N (400 lbs)
 - Operating: 600 N (130 lbs)
- **Min Bend Radius:**
 - Installation: 2.2in (5.5cm)
 - Operating: 1.1in (2.8cm)
- **Temperature:**
 - Operating: -40°F to 185°F (-40°C to +85°C)
 - Storage: -94°F to 185°F (-70°C to +85°C)

QMini Connectors:

- **Insertion Loss:** 0.75-2.0dB Max
- **Return Loss:** -34dB
- **Operating Temperature:** -50°F to 185°F (-46°C to +85°C)
- **Vibration:** 10 to 2000Hz / 10g, EIA/TIA-455-11, Condition III and 10 to 2000Hz / 20g / 9g RMS Avg, EIA/TIA-455-11, Condition IV
- **Mating Durability:** 3000 Cycles
- **Impact:** 8 Impacts @ 8FT (2.5MT), EIA/TIA-455-2
- **Shock:** 50g for 11ms, EIA/TIA-455-14, Condition A
- **IP Rating:** QMini, QMini45S, QMini90S Plugs and Receptacles with Backshells: IP68 - Dust Tight, No ingress of dust; complete protection against contact, Water Immersion, 1m | Testing Conditions & Duration - Plug with Dust Cover and Mated Plug / Receptacle, 3 Meters for 24 Hours