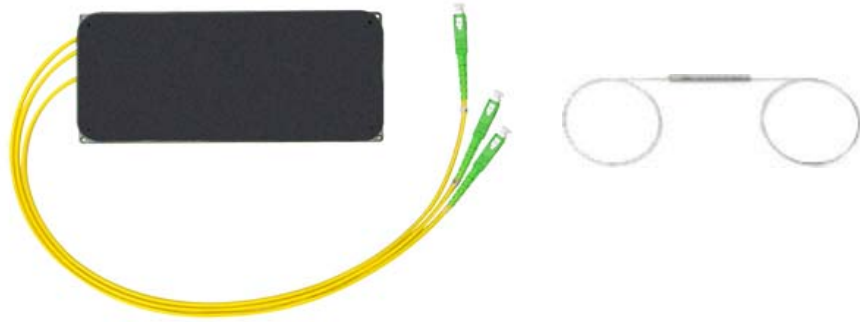# CIRM | 1550nm Fiber Circulator

The QAMnet CIRM fiber optic circulator is a compact, patented, high-performance fiber optics component that enables bi-directional transmission in optical fiber. It separates the transmitting signals from Port 1 to Port 2, and direct the receiving signals from Port 2 to Port 3. CIRM is designed to operate for broad wavelength range from 1528nm to 1565nm. This component provides high isolation, very low insertion loss, low polarization dependent loss (PDL), low polarization mode dispersion (PMD), and excellent environmental stability.

CIRM is available in either a rugged module with SC/APC connectors or unpackaged device form. The module housing is fabricated with machined aluminum.

Port 1 ⟶ **CIRM** ⟶ Port 2

Port 3 ⟵
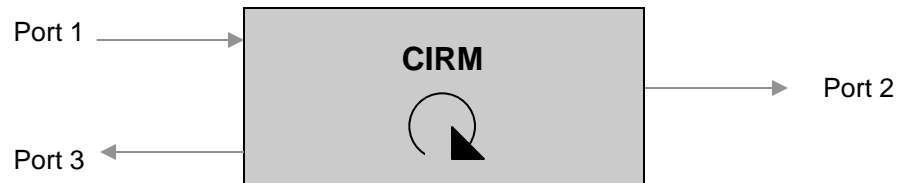
Features

- Low insertion loss

- High isolation value of 50dB

- Reliable and durable

- Broad wavelength window operation

- Rugged construction (module type)

- Operating temperature range -30 °C to + 55 °C

Ordering Information

- CIRM-15-x

- x: a (housing type A with connectors)

    b (housing type B with connectors)

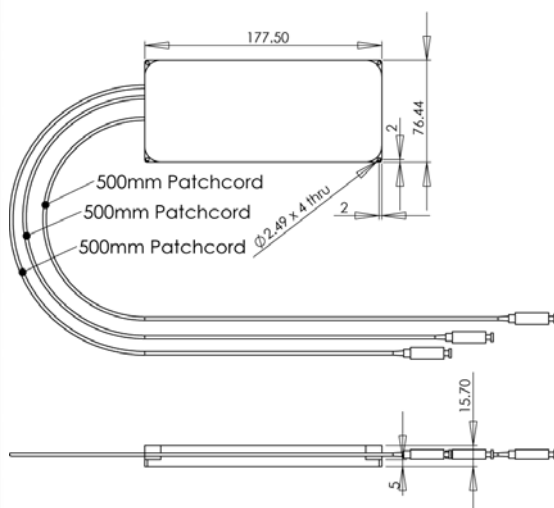   d (unpackaged device)

Technical Specifications

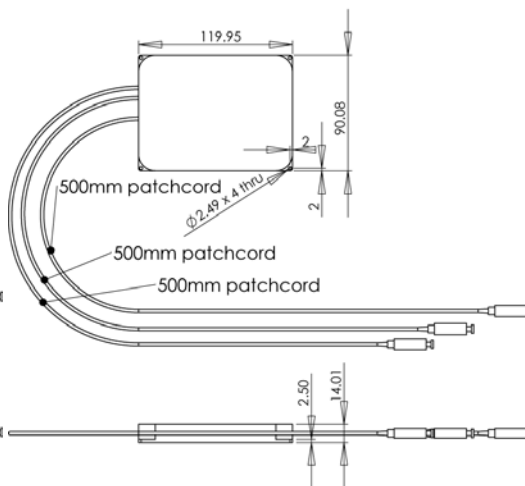|	
Model Number	CIRM
Operating Wavelength	1528 nm - 1565 nm
Polarization Type	Polarization Insensitive
Isolation	Port 2 to Port 1: 50 dB Minimum Port 3 to Port 2: 50 dB Minimum
Insertion Loss	Port 1 to Port 2: 0.6 dB Typical (unpackaged device) Port 2 to Port 3: 0.6 dB Typical (unpackaged device)
Return Loss	55 dB Minimum
Polarization Dependent Loss	0.12 dB Maximum
Maximum Power Handling	1000 mW

Mechanical Specification

Connectors	SC/APC or customer specified
Device Dimensions	65mm (L) x 6.25mm (Φ)
Housing Dimensions	Type A: 177.5mm (L) x 76.4mm (W) x 15.7mm (H)
	Type B: 120.0mm (L) x 90.1mm (W) x 14.0mm (H)
Fiber Patchcrd	3mm, 0.5 meter length

Type A

Type B