



## Constellation CMFL-2 RF over Fiber Module

### Advantages

- ✓ Hot Swappable
- ✓ Modular Design
- ✓ Configurations
  - 1 Transmit and 1 Receive
  - 2 Receive
  - 2 Transmit
- ✓ Bandwidth Options
  - 30 MHz to 2.7 GHz
  - 1 MHz to 3.3 GHz
- ✓ RF Connector Options
  - SMA, F

### Details

The Constellation CMFL-2 RF over Fiber Module provides a low loss alternative to traditional antenna cables. The module provides unity gain and virtually eliminates the loss normally encountered between the antenna site and the teleport. Constellation CMFL-2 RF over Fiber Modules have two RF over Fiber channels that can be independently specified allowing for a multitude of transmit and/or receive combinations that can be ordered to suit your requirements.

# Constellation CMFL-2

## RF over Fiber

### Module

DC Operation	Min	Typical	Max
Operating Current	110 mA	130 mA	140 mA
Operating Voltage	16 Volts	24 Volts	30 Volts

Optical Transmitter	Min	Typical	Max
Frequency Bandwidth	30 MHz	-	2700 MHz
Extended Frequency Bandwidth	1 MHz	-	3300 MHz
RF Input Port Return Loss (S11)	-	12dB	-
Input Power (without LNA Option)	-	-	+15 dB
Impedance	50 Ω /75 Ω		
Input Power with LNA option	-	-	0 dB
Optical Wavelength	-	1310 nm	-

Receiver	Min	Typical	Max
Optical Wavelength	-	1310 nm	-
Input Optical Power	-	-	4 mW
RF Port Return Loss (S11)	-	12 dB	-
Impedance	50 Ω /75 Ω		
Spurious Free Dynamic Range	-	109 (dB/Hz) <sup>2/3</sup>	-

System	Min	Typical	Max
Gain Flatness	-1.5dB	-	+1.5 dB
Gain	3 dB	4 dB	5 dB
Gain LNA	+19 dB	+20 dB	+21 dB
Operating Temperature	-40 C	-	+75 C
Receive Optical Power LED Alarm Threshold	-10 dBm	-	-
Laser Bias Current LED Alarm Threshold	110 mA	-	-

