



## FRPR Series Fiber Return Path Receivers

The **FRPR Series (Fiber Optic Return Path Receivers)** is a rack-mounted fiber optic return path receiver. The 1RU chassis contains two (2) or four (4) independent optical return path receivers all supporting a bandwidth from 5-204 MHz.

The **FRPR** is a high-density, full-featured receiver that utilizes high-performance photodiodes and hybrid amplifiers for cable modem up-stream signals. Optical input indicators and front panel -20 dB RF test ports are provided on each receiver for set-up and testing. A front panel RF attenuator on each receiver section allows the user to adjust the RF output level.

**2x or 4x Optical Input  
1100~1650nm**



**2x or 4x 5-204 MHz  
RF Output  
(FRPR-4 Shown)**

### Features

- Full-featured Return Path Receiver with bandwidth of 5-204 MHz
- Compatible with 1310nm, 1550nm and all CWDM and DWDM wavelengths
- Band pass filter suppresses noise
- -20 dB RF Test Points for real-time monitoring
- Universal AC power
- 20 dB continuously variable RF attenuator

### Ordering Information

Model	Stock #	Description
FRPR-2	7639-2	Fiber Return Path Receiver, 2 Receivers; 5-204 MHz
FRPR-4	7639-4	Fiber Return Path Receiver, 4 Receivers; 5-204 MHz

## FRPR Series

### Fiber Return Path Receivers

#### Specifications

##### Input

<b>Optical Characteristics (with SM 9/125µm SM Fiber)</b>	
<b>Operating Wavelength:</b>	1100 to 1650 nm
<b>Recommended Opt. Input Power:</b>	-12 to 0 dBm
<b>Optical Input Power:</b>	-15 to +2 dBm
<b>Optical Return Loss:</b>	> 45 dB
<b>Optical Connector (Std.):</b>	SC/APC

##### Output

<b>Frequency Range:</b>	5 to 204 MHz
<b>RF Output Level:</b>	>30 dBmV at -8 dBm Optical & 0 dB Attenuation
<b>Pass Band Flatness:</b>	±0.75 dB
<b>RF Adjustment Range:</b>	-20 to 0 dB
<b>RF Test Point:</b>	-20 dB
<b>Noise Power Ratio:</b>	>15 (DFB)
<b>Return Loss:</b>	16 dB
<b>Impedance ("F" Connector):</b>	75 Ω

#### General

<b>Dimensions (W x H x D):</b>	19" x 1.75" x 12.8" (483mm x 44mm x 324mm)
<b>Weight:</b>	5.35 lbs. (2.42 kg)
<b>Power Supply Voltage:</b>	100 to 240 VAC
<b>Frequency:</b>	50 to 60 Hz
<b>Power Consumption:</b>	28 W
<b>Operating Temperature:</b>	32 to 122 °F (0 to 50 °C)
<b>Storage Temperature:</b>	-40 to 149 °F (-40 to 65 °C)
<b>Humidity:</b>	5 to 95% RH, non-condensing

#### Block Diagram (FRPR-4 Shown)

