



### **DEVICE**

# Standard Forward Receiver

## **OVERVIEW**

The Optilab fRCVR-S series forward path high performance receivers are reliable for use in HFC, FTTH and deep fiber applications. The fRCVR-S uses a high gain, low distortion receiver module and low noise RF circuit to deliver 50 dB of CNR, while maintaining optimal CSO and CTB distortion specifications. fRCVR-S supports up to 75 NTSC analog channels. Designed to be digitally ready, they can be loaded with 60 additional QAM modulated digital channels. The fRCVR-H model provides a higher level RF output of 40 dBmV.

#### **FEATURES**

- Highly linear hybrid O/E converter
   module
- Automatic Gain Control (AGC) for automatic adjustment optical input level
- Manual Gain Control (MGC) for optimal RF gain level control
- LED front panel digital display and status indicators
- 45-870 MHz modulation bandwidth
- Compact 1U housing
- Built in RF test port (-12 dB)

#### **USE IN**

- HFC
- FTTH
- RFoG
- Deep Fiber Applications







## **SPECIFICATIONS**

GENERAL

Receiver Wavelength Range	1200 nm – 1600 nm
Input Optical Power Level	+3 dBm to -5 dBm
RF Output Power Level	40 dBmV typ.
Number of Outputs	1 Standard, 2 Output (optional)
Optical Return Loss	50 dB min.
Carrier to Noise Ration (CNR)	52 dBc min. 🛽 O dBm
Composite Second Order (CSO) Distortion	-65 dBc max. @ O dBm
Composite Triple Beat (CTB) Distortion	-58 dBc max. @ 0 dBm
Output Attenuation Range	0 – 20 dB (manual adjustment)
Frequency Range	45 MHz to 870 MHz
Flatness in Frequency Range	± 0.5 dB
Output Impedance	75Ω
Output RF Return Loss	16 dB min.
	100

**MECHANICAL** 

Operating Temperature Range	-20°C to +50°C
Storing Temperature Range	-40°C to +70°C
Power Supply	80 - 240 V, 43-63 Hz AC
Power Consumption	50 W max,
Housing Dimensions	1U Rack: 19" (W) x 14" (D) x 1.75" (H)
Control / Monitoring	Housing Temperature
Display	RF Output Power Level
Optical Connectors	SC/APC or Customer Specified

