



DEVICE

Forward Receiver - High Output

OVERVIEW

The Optilab fRCVR-H series forward path high performance receivers are reliable for use in HFC, FTTH and deep fiber applications. The fRCVR-H 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-H 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 52 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 | 52 dBmV typ. |
| Number of Outputs | 1 Standard, 2 Output (optional) |
| Optical Return Loss | 50 dB min. |
| Carrier to Noise Ration (CNR) | 52 dBc min. 🛭 0 dBm |
| Composite Second Order (CSO) Distortion | -65 dBc max. @ 0 dBm |
| Composite Triple Beat (CTB) Distortion | -58 dBc max. @ O 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. |
| | 200m. |

MECHANICAL

| Operating Temperature Range | 0°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 |

