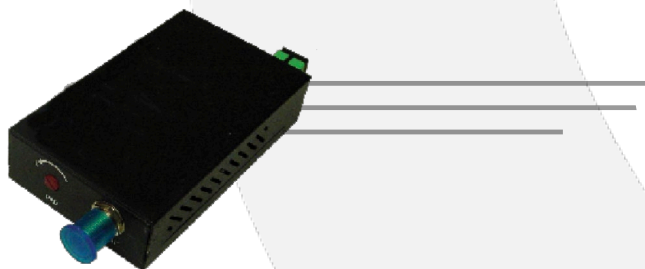


iRCVR-1



DEVICE

FTTH Optical Receiver

OVERVIEW

The Optilab iRCVR-1 series optical receivers are versatile, low-cost and compact optical receivers for use in HFC, FTTH, and deep fiber applications. The iRCVR-1 uses a broadband PIN diode and low distortion RF amplifier circuit to deliver sufficient level of CNR, while maintaining optical CSO and CTB distortion specifications. Designed to operate in very low input level, iRCVR provide high optical gain across the input level. At -8 dBm of input level (OMI index of 3.5%), iRCVR-1 can still provide 44 dB of CNR and RF output level of 17 dBmV. With a compact dimensions and light weight, iRCVR-1 can be utilized in almost any space requirements.

FEATURES

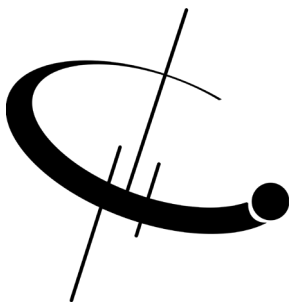
- High linearity analog PIN diode with low-noise, high-gain RF amplifier
- Wide range of input power from +3 dBm to -11 dBm
- Compact, light weight with metal housing
- Manual gain control for the adjustment RF output level
- LED input optical power status indicators
- 45-870 MHz modulation bandwidth
- 110 V AC power adaptor included

USE IN

- RFoG
- Deep Fiber Applications
- HFC
- FTTH



optilab



iRCVR-1

SPECIFICATIONS

Operating Wavelength	1200 nm to 1600 nm
Optical Input Level	+3 dBm to -9 dBm (A) -1 dBm to -11 dBm (B)
RF Output Power Level (3.5% OMI)	16 dBmV @ -5 dBm (A) 17 dBmV @ -8 dBm (B)
Carrier to Noise Ratio (CNR)	50 dBc typ. @ -5 dBm
Composite Second Order (CSO) Distortion	-61 dBc max. @ -5 dBm
Composite Triple Beat (CTB) Distortion	-63 dBc max. @ -5 dBm
Optical Return Loss	50.0 dB max.
Output Attenuation Range	0 to 18 dB adjustable
Frequency Range	45 MHz to 870 MHz
Flatness in Frequency Range	±1.0 dB
Output RF Return Loss	13 dB min.
Optical Fiber	SMF-28
Impedance	50 Ω

TECHNICAL

MECHANICAL

Operating Temperature Range	-20°C to +50°C
Storage Temperature Range	-40°C to +70°C
Power Supply Requirements	12 V DC, 100 mA (receiver)
Power Consumption	5 W max.
Optical Connector	SC/APC, or to be specified
RF Input Connector	
DC Connector	
Housing Dimensions	2.5" x 4" x 0.9"
Accessories Included	80 - 240 V, 43 - 63 Hz AC (AC Adaptor)

