FTTH Optical Receiver - Four Output

The QAMnet iRCVR-4 series optical receivers are versatile, low cost and compact for use in HFC, FTTH and deep fiber applications.



Product Description

The QAMnet iRCVR-4 series optical receivers are versatile, low cost and compact for use in HFC, FTTH and deep fiber applications. The iRCVR-4 uses a broadband PIN diode and a low distortion RF amplifier circuit to deliver a sufficient level of CNR, while maintaining optimal CSO and CTB distortion specifications.

Designed to operate with very low input level, iRCVR-4 provides high optical gain. At -8 dBm of input level (OMI index of 3.5%), iRVCR-4 can still provide 49 dB of CNR and RF output level of 23.7 dBmV. With compact dimensions and light weight housing, iRCVR-4 can be utilized in almost any space requirement. The operating temperature range of iRCVR-4 is from -20°C to +50°C.

Features

- High linearity PIN diode with low-noise, high-gain RF amplifier
- Wide range of input power from +3 dBm to -12 dBm
- · Gain control knob for the adjustment RF output level
- LED input optical power status indicators
- 45-870 MHz modulation bandwidth
- Compact, light weight with metal housing
- Operating temperature range is from -20°C to +50°C.
- 110 V AC power adaptor included.

Applications

✓ HFC ✓ FTTH ✓ RFoG ✓ Deep Fiber Applications

QAMnet 5110 N 44th St, Ste 200L, Phoenix AZ 85018

PRODUCT SPECIFICATIONS

Optical Specifications

| Receiver Wavelength Range | 1200 nm - 1600 nm |
|-----------------------------------------|----------------------------------|
| Input Optical Power Level | +3 dBm to -12 dBm |
| RF Output Power Level | 25 dBmV typ. @ 0 dBm |
| Number of Outputs | 4 |
| Optical Return Loss | 50 dB min. |
| Carrier to Noise Ration (CNR) | 53 dBc min. @ 0 dBm |
| Composite Second Order (CSO) Distortion | -52 dBc max. @ 0 dBm |
| Composite Triple Beat (CTB) Distortion | -50 dBc max. @ 0 dBm |
| Output Attenuation Range | 0 - 18 dB (manual adjustment) |
| Frequency Range | 45 MHz to 870 MHz |
| Flatness in Frequency Range | ±1.0 dB |
| Output Impedance | 75 Ω |
| Output RF Return Loss | 13 dB min. |

Mechanical Specifications

| Operating Temperature Range | -20°C to +50°C |
|--------------------------------|------------------------------------------------------------------------|
| Storing Temperature Range | -40°C to +70°C |
| Power Supply | 12 VDC, 100 mA (receiver) 80 - 240 V, 43 - 63 Hz AC (AC adaptor) |
| Power Consumption | 5 W max. |
| Housing Dimensions | 2.5"(W) x 4"(L) x 0.9""(H) |
| Display | 2 LEDs Indicate Optical Input Power Level and Power Supply |
| Optical Connectors | SC/APC or Customer Specified |
| Housing Dimensions | 2.5" x 4" x 0.9" |
| Accessories Included | 80 – 240 V, 43 – 63 Hz AC (AC adaptor) |

Ordering Information

iRCVR-4