# **Outdoor Optical Receiver**

The QAMnet nRCVR series outdoor optical receivers are reliable and costeffective for use in HFC, FTTH and deep fiber applications.



# **Product Description**

The QAMnet nRCVR series outdoor optical receivers are reliable and costeffective for use in HFC, FTTH and deep fiber applications. The nRCVR uses a high gain, low distortion receiver module and low noise RF circuit to deliver 52 dB of CNR while maintaining optimal CSO and CTB distortion specifications.

The nRCVR supports up to 75 NTSC analog channels. Designed to be digitally ready, they can be loaded with 60 additional QAM modulated signal channels. The QAMnet nRCVR can be ordered with 1 to 4 output ports with four RF output level to select from: 36 dBmV, 40 dBmV, 44 dBmV and 48 dBmV.

#### Features

- Highly linear hybrid O/E converter module
- Weather proof cast aluminum outdoor housing
- Automatic Gain Control (AGC) for optimal adjustment optical input level
- LED front panel digital display and status indicators
- 45-870 MHz modulation bandwidth
- Standard 60 VAC power supply
- 1 x 4 RF output ports

### **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                  | +1 dBm to -9 dBm                   |
| RF Output Power Level                      | 36, 40, 44, 48 dBmV                |
| Number of Outputs                          | 1 Standard, up to 4 can be ordered |
| Optical Return Loss                        | 50 dB min.                         |
| Carrier to Noise Ration (CNR)              | 52 dBc typ. @ 0 dBm                |
| Composite Second Order (CSO)<br>Distortion | -62 dBc max. @ 0 dBm               |
| Composite Triple Beat (CTB) Distortion     | -62 dBc max. @ 0 dBm               |
| Output Attenuation Range                   | 0 - 20 dB (manual<br>adjustment)   |
| Frequency Range                            | 45 MHz to 870 MHz                  |
| Flatness in Frequency Range                | ±0.5 dB                            |
| Output Impedance                           | 75 Ω                               |
| Output RF Return Loss                      | 16 dB min.                         |
|  |                                    |

# Mechanical Specifications

| Operating Temperature<br>Range | -40°C to +55°C  |
|--------------------------------|---|
| Storing Temperature Range      | -50°C to +75°C  |
| Power Supply                   | 60 V, 43 - 63 Hz AC 40 - 58<br>VDC (optional)                     |
| Power Consumption              | 50 W max.   |
| Housing Dimensions             | Determined by number of<br>output and RF level - Contact<br>Sales |
| Control / Monitoring           | Optical Input Level   |
| Display                        | RF Output Power Level   |
| Optical Connectors             | SC/APC or Customer<br>Specified                                   |

#### **Ordering Information**

#### nRCVR-xx-y

36, 40, 44, 48 (output RF Power Level in dBmV)

1, 2, 4 (Number of Outputs)