

# **RPR-2** Return Path Receiver



**User Manual** 



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## NOTE TO FIBER OPTIC SYSTEM INSTALLER

This reminder is provided to call the CATV System Installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.



### INVISIBLE LASER RADIATION! AVOID EYE INJURY! NEVER LOOK INTO THE OPTICAL CONNECTOR!

| PRECAUTIONS                              | REQUIREMENT  |
|--|--|
| Facilitate service and maintenance       | Allow a minimum of 35 in. (90 cm) clearance in front of the equipment rack(s).                                       |
| Avoid direct heating or air conditioning | If unavoidable, use deflector plates.  |
| AC Power source outlets                  | Locate equipment near sufficient outlets to provide power for test equipment and power tools.                        |
| Rack support                             | Make certain rack supports are sufficiently rigid to support rack(s).  |
| Building leakage                         | Beware of dripping water onto equipment from leaky roofs, waveguide roof entries, and cold water pipe condensations. |

#### **Toner RPR-2 User and Setup Manual**

The RPR-2 is a compact dual return path (5-300 MHz) fiber optic receiver using a GaAs Hybrid for optimum, performance with very low distortions

- Mount the RPR-2 using our OTLL-RMKit-1 or for rack mounting (up to 3 units) or use the 1.0 RPR-WMB to mount to a wall or other flat surface
- 2.0 Connect the optical fiber cable to the RPR-2 for either Ch-A or CH-B using a Green SC/ APC connector. Make sure the Optical power is between -14 and +3 dBm
- Plug the AC Power supply into a standard 120VAC electrical outlet and plug the 3.5 MM 3.0 cord into the back of the RPR-2
- 4.0 Connect the RF output cable
- 5.0 Using a signal level meter connect to the -20 dB Test port
- Using the controls on the front panel you can adjust the RF output level up or down 6.0 using the respective buttons
- 7.0 The LED marked Input level will indicate the optical input signal level Yellow = Low input, less than -6 dBm Green = Optimal input level for AGC -6 dBm to 0 dBm Red + High input level over 0 dBm
- AGC, the AGC Button allows you to turn on or off the AGC as indicated by the 8.0 respective LED lights
- NOTE: The USB port is only used for Firmware upgrade



#### **Block Diagram**



#### Specifications

| Paremeter             | Specification             |
|-----------------------|---------------------------|
| OPTICAL               |                           |
| Input wavelength      | 1100 to 1650 nm           |
| Input level           | -14 to +3 dBm             |
| Input AGC Range       | -6 to 0 dBm               |
| Input connector       | SC/APC                    |
| Input Return Loss     | ≥45 dB                    |
| AGC Control           | On or Off                 |
|                       |                           |
| RF                    |                           |
| Bandwidth             | 5 to 300 MHz              |
| Flatness              | ± 1.0 dB                  |
| Maximum Output Level  | 50 dBmV                   |
| Attenuation Range     | 0 to 40 dB                |
| Return Loss           | ≤ 18 dB (@ 40 MHz)        |
| Test Point            | -20 dB                    |
|                       |                           |
| Mechanical            |                           |
| Power                 | 12 VDC                    |
| Load                  | 4.5 Watts                 |
| RF Connectors         | F Female                  |
| Firmware update       | USB                       |
| Operating Temperature | 22 to 120°F (-5 to +50°C) |
| Dimensions            | 5.2 x 1.57 x 3.9"         |
|                       | (132 x 41 x 100 mm)       |
| Weight                | 0.9# (408 Grams)          |
|                       |                           |
| Options               |                           |
| Triple 1 RU Rackmount | OTLL RMKit-1              |
| Single wall mount     | RPR-WMB                   |