

LaserLite OTOR-300

STANDALONE -or- 1RU RACKMOUNT RETURN OPTICAL RECEIVER

Features / Benefits

- Ultra Wide 5-300 MHz Passband supports traditional 5-42/65 MHz Return or newer Return Multiplexer topologies
- High Sensitivity, Wide Optical Input Window (-14 dBm to +3 dBm) at 1310nm or 1550nm wavelengths
- Low Noise, High RF Output Level to +45 dBmV set via internal plug-in attenuator pad
- Unsurpassed Return Path Performance with High NPR of > 41 dB and Wide Dynamic Range of > 15 dB
- Unique, Self-Contained, Low-Profile, Rugged Package designed for Low-Density Standalone CATV applications
- Optional 19" EIA Rack Kit mounts up to (3) OTOR-300's on a 1RU chassis panel for Higher-Density applications
- Low Power Consumption; Runs Cool; Integrated Universal 90-240 VAC Power Supply (24 VDC option)
- Very Cost Effective



The **OLSON TECHNOLOGY INC. LaserLite Model OTOR-300** is a high quality, cost effective CATV Return Path Receiver which utilizes a new low noise, impedance matched, high efficiency 1310/1550 nm broadband photodiode and advanced RF amplification circuitry to facilitate carriage of critical downstream video, data, telephony and internet traffic in an HFC broadband environment. The unit is ideally suited for direct fiber reception of CATV RF signals in FTTC, FTTH, MDU, industrial, corporate, government, educational or other I-Net applications where a high performance, compact, standalone downstream receiver is required for desktop, shelf or wall-mounting.

The **OTOR-300** is a rugged, self-contained device with external RF and optical connections and test points and internal 90-40 VAC power supply. The field-configurable SC-APC (or optional FC-APC) optical input connector can be mounted on the front-panel or rear-panel of the unit. The unit is forced air cooled via an external high-MTBF fan, which is designed to be field-replacable without interrupting operation.

The unit features a unique provision which allows the the **OTOR-300** to perform as a standalone downstream receiver -OR- as a rack mount return receiver with the addition of the Model# OTLL-RMKIT (optional). Up to (3) OTOR-300's can be can be mounted in a 1RU (1.75") 19" EIA space with each kit.

The **OTOR-300** is the perfect companion to other models in the Olson Technology, Inc. *LaserLite* and *LaserPlus* product families, but is also designed to mate with optical transmitters and receivers from most leading manufacturers. The **OTOR-300** can also be co-located with the Olson Model **OTOT-870-x** Optical Transmitter to form the headend side of a two-way "transceiver" configuration, when mated on the remote subscriber end with the Olson Model **OTPN-1000** indoor node or Olson Model **OTMN-II** outdoor 4-port node.

LaserLite OTOR-300

- Specifications -

Optical:

Optical Wavelength..... 1290 nm to 1600 nm
Optical Input Power..... -14 dBm to +3 dBm
Equivalent Noise Current..... < 7 pA/Hz
Optical Input Connector..... SC/APC Standard, FC/APC optional
Optical Test Point..... Optical Power Monitor; Test Jack: 1V/mW

RF:

Frequency Range..... 5 MHz to 300 MHz
Frequency Response..... +/- 1.0 dB
Output Impedance..... 75 ohms
Output Return Loss..... > 15 dB
RF Output Level..... + 45 dBmV @ -14 dBm optical or greater with Olson Technology Return Transmitter with 6 Channels @ 10% OMI

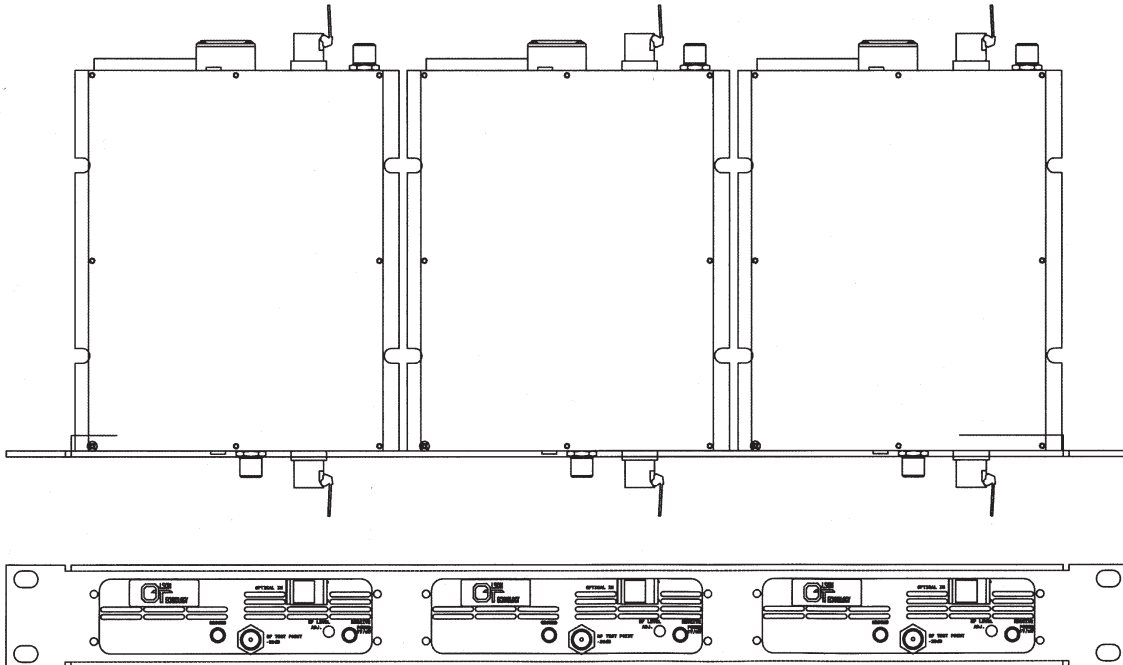
Performance:

Noise Power Ratio (NPR)..... > 41 dB
NPR Dynamic Range..... > 15 dB
Measured with OT 3 mW Return Transmitter and 10 dB fiber link

RF Connectors..... Type F
RF Test Point..... RF Output Monitor; Test Jack: -20 dB, +/- 1.0 dB

Other:

Powering Requirements..... 90 VAC to 240 VAC @ 50-60 Hz; < 10 watts
Power Connector..... IEC 320 WITH 5X20 0.5a Slo Blo Fuse
Operating Temperature..... 0 degrees C to +45 degrees C
Humidity..... to 95% non-condensing
Size..... 5 15/32" (W) x 1 3/8" (H) x 7 5/8" (D)
Weight..... 1.5 lbs. / 0.68 kg



(3) OTOR-300 RX's on optional OTLL-RMKIT1