

## STANDALONE-or- 1RU RACKMOUNT RETURN OPTICAL RECEIVER OTOR-300

### Features and Benefits

- Ultra Wide 5-300 MHz Passband supports traditional 5-42/65MHz Return or newer Return Multiplexer topologies
- High Sensitivity, Wide Optical Input Window (-14dBm to +3dBm) at 1310nm or 1550nm wavelengths Low Noise, High RF Output Level to +45dBmV set via internal plug-in attenuator pad
- Unsurpassed Return Path Performance with High NPR of >41dB and Wide Dynamic Range of >15dB
- 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 V DC option)
- Very Cost Effective



The OLSON TECHNOLOGY LaserLite Model OTOR-300 is a high quality, cost effective CATV Return Path Receiver which utilizes a new low noise, impedance matched, high efficiency 1310/1550nm 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 90-240 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 colocated with the Olson Model OTOT-1000-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.



OPTICAL	
Optical Wavelength	1290nm to 1610nm
Optical Input Power	-14dBm to +3dBm
Equivalent Noise Current	< 7pA/Hz
Optical Input Connector	SC/APC Standard, FC/APC optional
Optical Test Point	Optical Power Monitor; Test Jack: 1V/mW
RF	
Frequency Range	5MHz to 300MHz
Frequency Response	±1.0 dB
Output Impedance	75 Ohms
Output Return Loss	> 15dB
RF Output Level	+ 45dBmV @ -14dBm optical or greater with Olson
	Technology Return Transmitter with 6 Channels
	@ 10% OMI
Performance	
Noise Power Ratio (NPR)	> 41dB
NPR Dynamic Range	> 15dB
	Measured with OT 3 mW Return Transmitter and 10dB
	fiber link
RF Connectors	Type F
RF Test Point	RF Output Monitor; Test Jack: -20dB, ±1.0dB
OTHER	
Powering Requirements	90 VAC to 240 VAC @ 50-60Hz; < 10 Watts
Power Connector	IEC 320 WITH 5X20 0.5a Slo Blo Fuse
Operating Temperature	0°C to +45°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. / 0.68kg



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