

OTON-II

HIGH PERFORMANCE OPTICAL NODE

Features / Benefits

The **OLSON TECHNOLOGY INC OPTO NODE II** is a high level single output optical node that employs the latest GaA's technology throughout. The unit operates over a wide optical input range of -4dBm to + 3dBm and provides output levels of >+50dBmV depending upon slope and channel loading. The DFB return laser transmitter provides the optimum in output power (3mW) and distortion with the >41dB NPR range being >15dB. An internal status panel provides for easy setup and monitoring of internal voltage and optical levels.

The wide operating environmental range of -40°C to +65°C ensures the optimum in long term reliability. All parts are protected against lightning and transients.



OPTIONAL FEATURES

- Available for 65MHz/85MHz frequency split or 42MHz/53MHz frequency split.
- Available with lower performance F.P Return Laser. 1mW typical output power.
- High sensitivity receiver for optical input levels of -6dBm optical to 0dBm optical.
- Dual redundant Optical Receiver Module.
- Dual Optical Transmitter module.

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SPECIFICATIONS

Optical Input Range.....	-4dBm to +3dBm
Forward Frequency Range.....	54MHz to 870MHz, or 85MHz to 870MHz
Reverse Frequency Range.....	5MHz to 42MHz, or 5MHz to 65MHz
Forward Frequency Response.....	<1.5dB 54MHz to 870MHz
Reverse Frequency Response.....	<1.5dB 5MHz to 42MHz or 5MHz to 65MHz
Output Level (Forward).....	+50dBmV @ 550MHz -4dBm optical input 16dB slope to 870MHz Transmitter OMI @ 3.2%
Distortion.....	>62dB CSO/CTB @ above output +3dBm optical input 16dB slope to 870MHz Transmitter OMI @ 3.2%
Carrier to Noise	>53dB @ <-1dBm optical
Output Return Loss.....	>16dB @ 54MHz to 870MHz
Input Return Loss.....	>16dB @ 5MHz to 42MHz or 5MHz to 65MHz
Return Laser Output Power.....	+3.0mW \pm 0.5mW
Return Path NPR	>15dB over 41dB NPR measured with 10dB fiber and Antec ELLR-S receiver
NPR 41 dB Threshold.....	-57dBmV/Hz
Operating Temperature Range.....	- 40°C to 65°C
Gain Variation vs Temperature.....	\pm 1.5dB
AC Power Requirements.....	60VAC @ 50-60Hz 45VAC to 90VAC 26Watts Maximum
Test Points.....	Output Port (forward) -20dB Return Port (reverse) -20dB Receiver Output (forward) -20dB AC Voltage - TP 1V/10V +13.5 VDC - TP +5.2 VDC - TP Receiver/Return Optical Power - 1V/mW Return Laser Current - 1V/50mA
Size.....	9-1/4"W, 6-1/2"D, 7-3/4"H Includes clamps for strand mount

Block Diagram

