

# OTPN-400C / OTPN-800C-H/L

## PremiseNode Optical Node Receivers

### OTPN-400C PremiseNode Receive Only Optical Node

**Entry level member of the Olson Technology's PremiseNode family offers high sensitivity, no frills, and low cost.**

- Receive only indoor optical node for fiber-deep FTTX/PON CATV applications.
- Wide optical input window of 0 to -8dBm at 1310/1550nm.
- High RF output range: +28dBmV @ -1dBm optical input and +14dBmV@-8dBm optical input.
- Full forward path bandwidth of 40-1,000MHz with low noise and distortion.
- Calibrated DC test point for optical input power (1V/mW).
- Tri-colored LED indicates optimal input range and power on.
- +12 V<sub>DC</sub> for local or remote "up-the-coax" powering via a Power Inserter Coupler (PIC).
- 6kV surge tolerant RF output and SMT construction for consistency, reliability, and performance.
- Low power consumption.
- New compact, light-weight, rugged cast aluminum housing for easy installation.



The Olson PremiseNode OTPN-400C Optical Node is a low-cost, compact, indoor CATV receive-only node in a new cast housing. It is designed with the latest optical receiver technology to reliably deliver a full slate of multiplexed video, data, and telephony services in an HFC (hybrid fiber/coax) or PON (passive optical network) broadband CATV environment.

The Model OTPN-400C is ideal for direct fiber transmission of CATV RF signals in FTTH, FTTx, MDU, corporate, government, educational, and other applications where a high performance, compact indoor node is required. The unit is constructed with high quality components to enable it to meet its performance specifications over a wide temperature range in an uncontrolled environment, but it does require protection from the elements. It is designed for desktop, shelf or wall-mounting.

The Model OTPN-400C offers good optical sensitivity, high RF output level, optical indoor power DC test point and optical level LED indicator. The unit includes a provision for flexible powering of the node, either locally through the DC Power IN "+12V<sub>DC</sub>" port, or remotely up the coax drop through the "RF OUT/+12V<sub>DC</sub>" port via an optional Power Inserting Coupler (PIC).

The Model OTPN-400C is the perfect companion to the Olson Technology, Inc. LaserLite and LaserPlus forward transmitter product families. It is also designed to mate with 1310nm, 1550nm, CWDM and DWDM optical transmitters from most leading manufacturers.

## OTPN-400C / OTPN-800C-H/L PremiseNode Optical Node Receivers

### OTPN-800C-H/L Customer Premises HFC/PON Optical Node/Receiver with Optional Return Transmitter



The Olson Technology, Inc. OTPN-800C-H/L PremiseNode is a compact, cost-effective, full-featured indoor CATV node designed using the very latest optical receiver technology to reliably deliver a full slate of multiplexed video, high speed data and telephony services in an HFC or PON broadband CATV environment.

The unit is ideally suited for direct fiber transmission of CATV RF signals in FTTH, FTTX, MDU, industrial, corporate, government, educational, I-Net or traditional HFC applications where a high performance, compact indoor node is required. The unit is constructed with high quality components to enable it to meet or exceed its performance specifications over a wide temperature range in an uncontrolled environment, but it does require protection from the elements. It is configured for desktop, shelf or wall-mounting.

The base Model OTPN-800C-H/L is a low-profile, rugged stand-alone optical receiver with: wide ranging and exceptional optical sensitivity; excellent CNR/CSO/CTB performance; choice of two (2) RF output levels, and; external RF and optical connections, test points (optical and RF) & LED status indicators. This node also features a factory-installed or field-installable DFB or CWDM return laser option, resulting in a highly-integrated, small footprint, DOCSIS-compliant two-way node.

The OTPN-800C-H/L also features a provision for flexible powering of the node, either locally through the DC Power IN "+12V<sub>dc</sub>" port, or remotely up the coax drop through the "RF OUT/+12V<sub>dc</sub>" port via an optional Power Inserting Coupler (PIC). A universal wall-mount power supply (+12V/1.25A Wall-Mount AC/DC Power Supply and "F" Connector Adapter) is provided with each unit. SC/APC optical connector is standard. FC/APC optical connectors are optional.

The OTPN-800C-H/L is the perfect companion to the Olson Technology, Inc. LaserLite (Models OTOT-870C-x & OTOR-300) and LaserPlus (Models LP-OT-x and LP-OR) forward transmitter and return receiver product families, but is also designed to mate with 1310nm and 1550nm optical transmitters and return receivers from most leading manufacturers.

- Mid-Level member of the OT PremiseNode family: Cost-Effective, Full-Featured, Field-Upgradable
- Choice of two (2) RF Output Levels ("H" @ +38dBmV -or- "L" @ +28dBmV) @ -1dBm optical input
- "H" Version: incorporates internal Plug-in Equalizer for Slope control; 6dB @ 1,000MHz standard
- "H" Version: utilizes RF Output Level adjustment via internal user-adjustable variable attenuator.
- This version provides the full output level of +38dBmV at any optical input level from -8dBm to +2dBm.
- "L" Version: No Slope or RF Output Level controls (i.e. Slope = 0dB and RF Out varies with Optical Input)
- Wide Optical Input Window (+2dBm to -8dBm) @ 1310/1550nm
- Full CATV Forward Path Bandwidth to 1,000MHz (Analog and QAM Digital)
- DFB or CWDM return laser transmitter options for Two-Way DOCSIS operation
- Calibrated Power Meter (1V/mW) Optical Input power test point
- Forward and Return external RF test points (-20dB)
- Status LED's for optimal Optical Input and Output power ranges and unit Power-On indication
- +12V<sub>dc</sub> Local Direct or Remote Drop - \*Coax powering via Optional Power Inserter
- Low Power Consumption (Rx @ 6 Watts; Rx/Tx @ 7 Watts)
- > 6kV surge tolerant RF output and SMT construction for consistency, reliability & performance
- Compact (3"x 7"x 2.1"), Lightweight and Rugged cast aluminum housing for Easy Installation
- Power supply (+12V/1.25A) and "F" Connector Adapter included.