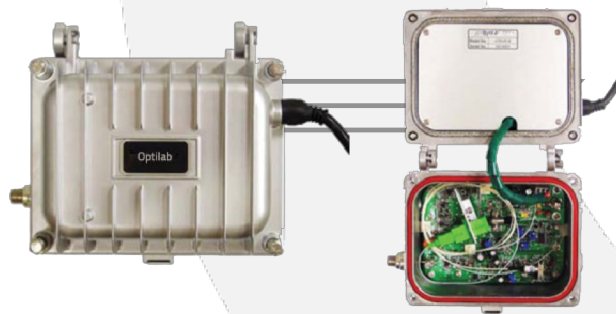




# nTRVR-B



## DEVICE

## Bi-Directional Outdoor Transceiver

## OVERVIEW

The Optilab nTRVR-B is a bi-directional outdoor optical node designed for deep fiber implementation in HFC networks. Using the proven Wavelength Division Multiplexing (WDM) technology, a 1550 nm receiver and a 1310 nm transmitter are combined into a common optical input/output port. The nTRVR-B is a versatile, compact, low cost transceiver optical node. With a standard HFC configuration of forward receiver and reverse transmitter, the nTRVR-B can provide the HD video and QAM data bandwidth capacity of a traditional HFC optical node, but at a small fraction of the cost. The nTRVR-B is an ideal deep fiber solution for delivering Switch Digital Broadcasting (SDB), as well as high-speed QAM data services over existing HFC infrastructure. Using a single optical input/output design, the nTRVR-B can be easily integrated into the next generation HFC networks architectures, such as RF over Glass (RFoG) or Cable Passive Optical Networks (Cable PON). Contact Optilab for more information.

## FEATURES

- 1550 nm forward path receiver
- 1310 nm return path transmitter
- Single optical fiber input/output
- Compatible with existing HFC installation
- Designed for RFoG and Cable PON networks
- Low power consumption
- 110 V AC power adaptor and RF diplexer included

## USE IN

- RFoG
- Deep Fiber Applications
- HFC
- FTTH



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# nTRVR-B

## SPECIFICATIONS

Receiver Wavelength Range	1527 nm – 1570 nm
Input Optical Power Level	+3 dBm to -6 dBm
RF Output Power Level	20 dBmV typ. @ 0 dBm
Number of Outputs	1 standard, up to 4 can be ordered
Carrier to Noise Ratio (CNR)	50 dB typ. @ 0 dBm Input
Composite Second Order (CSO) Distortion	65 dBc typ.
Composite Triple Beat (CTB) Distortion	62 dBc max.
RF Frequency Range	54 MHz to 870 MHz
Transmitter Wavelength	1310 nm ± 20 nm
Output Optical Power Level	+2.5 dBm typ.
RF Input Power Level	20 dBmV typ.
Carrier to Noise Ratio (CNR)	> 40 dB typ. @ 0 dBm
Composite Second Order (CSO) Distortion	-50 dBc max.
Composite Triple Beat (CTB) Distortion	-50 dBc max.
Frequency Range	5 MHz to 42 MHz
Flatness in Frequency Range	± 0.5 dB
Optical Return Loss	45 dB min.
RF Impedance	75 Ω
RF Return Loss	16 dB min.

## TECHNICAL

Operating Temperature Range	-40°C to +55°C
Storage Temperature Range	-50°C to +75°C
Power Supply	60 V, 43 – 63 Hz AC 40 – 58 VDC (optional)
Power Consumption	50 W max.
Housing Dimensions	Determined by number of outputs and RF level
Control/Monitoring	Optical Input Level
Display	RF Output Power Level
Optical Connectors	SC/APC, or customer specified

## MECHANICAL



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