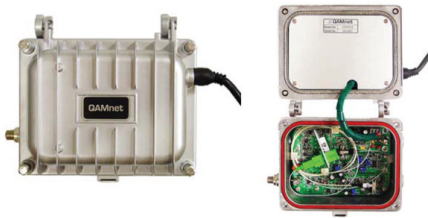


# Bi-Directional Outdoor Transceiver

The QAMnet nTRVR-B is a bi-directional outdoor optical node designed for deep fiber implementation in HFC networks.

nTRVR-B Bi-Directional Outdoor Transceiver



## Product Description

The QAMnet 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, 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).

## 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

## Applications

✓ HFC    ✓ FTTH    ✓ RFoG    ✓ Deep Fiber Applications



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## PRODUCT SPECIFICATIONS

### Optical Specifications

#### Forward Path - Receiver

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
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

#### Return Path - Transmitter

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

#### General Specifications

Flatness in Frequency Range	±0.5 dB
Optical Return Loss	45 dB min.
RF Impedance	75 Ω
RF Return Loss	16 dB min.

### Mechanical Specifications

Temperature Range	-20 to +65 °C
Power Supply	12 - 15 VDC (receiver) 80 - 240 V, 43 - 63 Hz AC (AC adaptor)
Power Consumption	5 W max.
Housing Dimensions	5.9"(W) x 4.5"(L) x 3.8"(H)
Control / Monitoring	N/A
Display	2 LEDs: Optical Input and Power
Optical Connectors	1, SC/APC

## Ordering Information

**nTRVR-B**