

iTRVR-B



Bi-Directional Mini-Node

The Optilab iTRVR-B is a bi-directional analog Optical Network Unit (ONU) designed for Deep Fiber and RFoG applications. Available in Burst Mode or CW, the iTRVR-B uses Wavelength Division Multiplexing (WDM) technology to combine 1550 nm forward-path signals and 1310 nm or CWDM return-path signals on a single optical port. The iTRVR-B can provide the HD video and QAM data bandwidth capacity of a traditional HFC optical node, but at a fraction of the cost. The return-path bandwidth capacity of the RFoG systems can be increased greatly by using return-path lasers from 7 different CWDM wavelengths. Additionally, this versatile, compact mini-node is well-suited for a node splitting solution of a deep fiber system that enhances an existing HFC infrastructure. Contact Optilab for more information.

Features

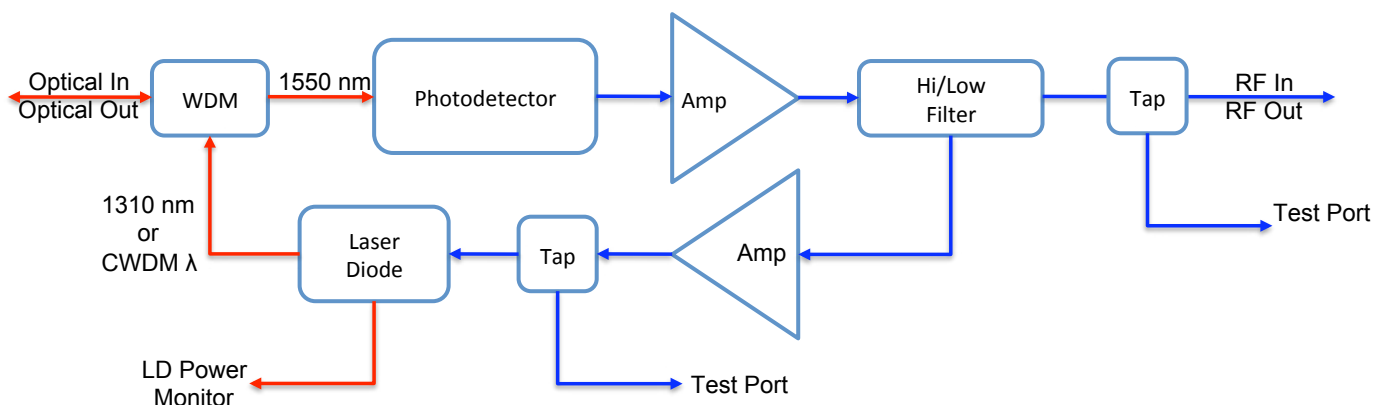
- 1550 nm forward-path receiver
- Return-path: 1310 nm or CWDM wavelength
- Available in CW or Burst mode
- Single optical fiber for forward / return path
- Low power consumption, compact and durable
- 12 VDC power adaptor included
- 3 year warranty standard

Applications

- HFC
- RFoG
- PON
- Deep Fiber Applications
- Many Optilab products are RUS accepted and meet Buy American



Functional Diagram



Bi-Directional Mini-Node | iTRVR-B

OPTIONS

iTRVR-B-x-yyyy

- x
 1: Burst Mode
 2: CW Mode
- yyyy
 Return Path λ :
 none - 1310 nm
 CWDM λ - See Table

TECHNICAL INFO

For technical info and support:

sales@optilab.com

www.optilab.com

WEB ORDER

To order, please visit OEQuest.com.



Optilab Advantage

- Innovation
- Performance
- Quality
- Customization
- Warranty

Optical Specifications - Forward Path (Receiver)	
Receiver Wavelength Range	1530 nm to 1560 nm
Input Optical Power	+3 dBm to -6 dBm
RF Output Power Level	35 dBmV
Carrier to Noise Ratio (CNR)	50+ dB typ. @ 0 dBm Input Level
Composite Second Order (CSO) Distortion	-63 dBc max.
Composite Triple Beat (CTB) Distortion	-63 dBc max.
Forward-Path Frequency Range	54 MHz to 870 MHz, 1 GHz available
Optical Specifications - Return-Path (Transmitter)	
Transmitter Wavelength	1310 nm \pm 20 nm, FP type (standard) or CWDM DFB available
Output Optical Power Level	+2 dBm typ.
RF Input Turn On Power Level	25 dBmV typ.
Burst Mode Switch on Time	1.0 μ s max.
MER of QAM64	34 dB min. at 20 MHz
Return-Path Frequency Range	5 MHz to 42 MHz
General Specifications	
Flatness in Frequency Range	\pm 0.5 dB
Optical Return Loss	45 dB min.
RF Impedance	75 Ω
RF Return Loss	16 dB min.
Mechanical Specifications	
Optical Connectors	1, SC/APC
Temperature Range	-20°C to +65°C
Power Supply	12 – 15 VDC 80 – 240 V, 43 – 63 Hz AC (AC adaptor)
Power Consumption	5 W max.
Housing Dimensions	4.6"(W) x 5"(L) x 1.3"(H)
Control / Monitoring	Voltage Monitoring: Optical Level 1V/ mW
Display	3 LEDs: Optical Input/Output and Power

Available DFB CWDM Wavelengths

CWDM λ
1310 nm
1490 nm
1510 nm
1530 nm
1570 nm
1590 nm
1610 nm