

Two Port RFoG Mini-Node

The QAMnet iTRVR-T is a bi-directional analog Optical Network Unit (ONU) designed for Deep Fiber and RFoG applications.

iTRVR-T Two Port RFoG Mini-Node



Product Description

The QAMnet iTRVR-T is a bi-directional analog Optical Network Unit (ONU) designed for Deep Fiber and RFoG applications. Incorporating a 1550 nm receiver and a 1310 nm or CWDM laser transmitter on separate optical port, iTRVR-T is a very versatile mini-node. It can be used for enhancing HFC, Deep Fiber installation and RFoG. The iTRVR-T is also a compact, low cost mini-node. With standard HFC configuration of a forward receiver and a reverse transmitter, the iTRVR-T can provide the HD video and QAM data bandwidth capacity of a traditional HFC optical node, but at a fraction of the cost and size. The return path bandwidth capacity of the RFoG systems can be increased by a factor of 8, by using return path laser with from 8 different CWDM wavelengths. Additionally, the iTRVR-T is well-suited for a node splitting solution of a deep fiber system that enhances an existing HFC infrastructure.

Features

- 1550 nm forward path receiver
- Fast Burst Mode operation
- Dual optical fiber for forward / return path
- Designed for FTTH and RFoG
- Low power consumption, compact and durable
- 12 VDC power adaptor included

Applications

✓ HFC ✓ FTTH ✓ RFoG ✓ GEAPON ✓ Deep Fiber Applications

PRODUCT SPECIFICATIONS

Optical Specifications

Forward Path - Receiver

Receiver Wavelength Range	1530 nm - 1560 nm
Input Optical Power Level	+3 dBm to -6 dBm
RF Output Power Level	25 dBmV typ.
Carrier to Noise Ratio (CNR)	50 dB typ. @ 0 dBm Input Level
Composite Second Order (CSO) Distortion	-60 dBc max.
Composite Triple Beat (CTB) Distortion	-60 dBc max.
Frequency Range	54 MHz to 870 MHz

Return Path - Transmitter

Laser Wavelength (standard)	1310 nm ± 20 nm, FP type
Laser Wavelength (standard)	1310 nm, 1450 nm, 1470 nm, 1490 nm, 1510 nm, 1570 nm, 1590 nm, 1610 nm
Output Optical Power Level	+2 dBm typ.
RF Input Turn On Power Level	25 dBmV min.
Burst Mode Switch on Time	1.0 μs max.
MER of QAM64	34 dB min. at 20 MHz
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

Optical Connectors	2, SC/APC
Temperature Range	-20 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

Ordering Information

iTRVR-T