

Dual-Fiber Transceiver

The QAMnet iTRVR-D is a dual-fiber optical transceiver designed for deep fiber implementation in HFC networks.

iTRVR-D Dual-Fiber Transceiver



Product Description

The QAMnet iTRVR-D is a dual-fiber optical transceiver designed for deep fiber implementation in HFC networks. Incorporating a 1550 nm receiver on one input port and a 1310 nm transmitter on the output port, this module is a versatile, compact and has a low cost. With standard HFC configuration of forward receiver and reverse transmitter, the iTRVR-D can provide the HD video and QAM data bandwidth capacity of a traditional HFC optical node, but at a fraction of the cost. The iTRVR-D is an ideal deep fiber solution for delivering Switch Digital Broadcasting (SDB), as well as high-speed QAM data services over existing HFC infrastructure.

Features

- 1550 nm forward path receiver
- 1310 nm return path transmitter
- Dual optical fiber input and output
- Compatible with existing HFC installation
- Designed for RFoG and Cable PON networks
- Low power consumption
- Compact and durable
- Receiving and transmitting built in RF test ports (-20dB)
- 12-15 VDC power adaptor included

Applications

- ✓ HFC ✓ FTTH ✓ RFoG ✓ PON ✓ Deep Fiber Applications

PRODUCT SPECIFICATIONS

Optical Specifications

Forward Path - Receiver

Receiver Wavelength Range	1527 nm - 1600 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	-61 dBc max.
Frequency Range	54 MHz to 870 MHz

Return Path - Transmitter

Transmitter Wavelength	1310 nm ± 20 nm
Output Optical Power Level	+3 dBm to -3 dBm
RF Input Power Level	15 dBmV typ.
Carrier to Noise Ratio (CNR)	dB typ. @ 0dBm
Composite Second Order (CSO) Distortion	dBc max.
Composite Triple Beat (CTB) Distortion	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

Optical Connectors	2, SC/APC
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	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-D