



Optical TRX 270 Mbit/s

The modules provides a reliable digital Video/Audio communication for satellite earth stations and broadcast link applications over optical fiber (up to 50 Km distance) to comply the features required for transmitting serial digital signal 270Mb/s ASI EN50083-9 and SDI BT656-3 standards.

In the transmitter module, after equalizing and re-clocking the digital input signal, returns via two active loop-through outputs, modulates the intensity of laser-module with an optoelectronics feedback loop to maintain a constant optical output power.

Features

- Automatic Equalization 40 db of Digital Input, 20 db dynamic rang of optical receiver
- -10dbm Transmitter Optical Power
- -10dbm ~ -30dbm Optical Receiver Sensitivity
- PLL and Transmitter/Receiver Status Indicator
- Installable in 3RU Digital Studio Subrack

Specifications

SDI/ASI Input/Output	
Standard	BT656-3, EN50083-9, 270 Mb/s,
Connector	BNC , 75 Ω
Return loss	> 18db @ 270 MHz
Input Equalization	40db Automatic
Outputs	BNC (× 2), 75 Ω,
Optical Input/Output	
Standard	BT1367,
Test	BT801
Output power	- 10dbm, Laser diode,
Input Power	-10dbm ~ -30 dbm
Connector	DIN, > 40db return loss
Fiber	9/125 , Single mode , G652
Wave Length	1310 nm
General	
Power	±5 VDC , 400 mA
Operating humidity	10 to 85%
Operating temp.	0 to +50°C
Dimensions	234 * 125 * 40

The optical signal is coupled into a single mode fiber pigtail with an optical connector. In the receiver module, after receiving the optical signal, feed from multimode pigtail fiber, converted to electrical with sensitive PIN photo diode, pre-amplified with low noise amp, automatic gain controlled, then re-clocked with precise P.L.L. to drive two digital SDI/ASI outputs.

Indicators for loss of input and Tx/Rx status, laser current measuring point are located in the front panel. BNC for digital input/output and DIN connector FOR optical in/out are located in the rear panel.

