
FRX forward optical receiver module

Description

FRX series forward receiver is a highly-performed, low noise optical receiver that converts amplitude modulated light energy to RF broadband signals. Designed for the OPT1000 Transport system, this receiver has nearly distortion less performance allowing it to be an almost transparent receiver in repeater application. The receiver's high-efficiency photo hybrid has excellent carrier-to-noise performance over long links.



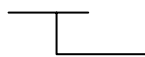
The FRX is configured in a standard OPT1000 Transport module chassis, which occupies one slot in the OPT1000 Transport shelf. The module supports OPT1000 diagnostics status monitoring system. Both options allow the receiver to communicate with other equipment in the network.

Features

- SC/APC or FC/APC optical connector is mounted on the front panel to facilitate connecting optical fiber and cleaning the optical connector.
- Auto optical link loss compensation
- The manual control allows you to adjust the RF output level ($\pm 3\text{dB}$).
- CPU controlling, the state of receiver can be got by the OPT1000.
- A 2-color LED indicates normal optical and optical alarm conditions.
- Adjust the output slope (0~+6dB)
- The unique thermal design of the housing provides superior heat dissipation, extending product life and enhancing reliability.

Product identification system

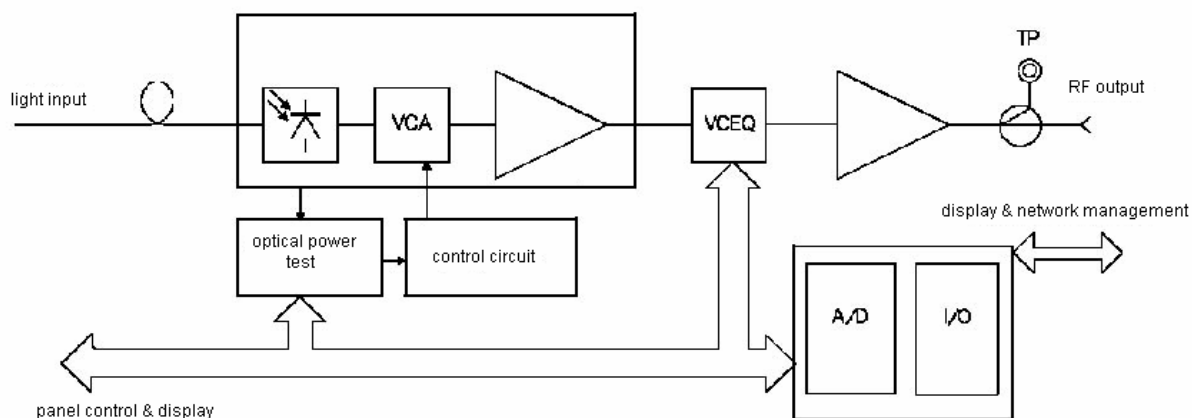
FRX 8 \triangle \triangle



Optical connector, **SC:** SC/APC

FC: FC/APC

Block diagram



Specifications

Item	Note	FRX8	Unit
Optical characteristics			
Optical receiver wavelength		1100~1600	nm
Optical return loss		>45	dB
Maximal input optical power		+3	dBm
Optical connector	1	FC/APC or SC/APC	
Electrical characteristics			
Bandwidth		47~862	MHz
Flatness		±0.5	dB
Return loss		>16	dB
Output impedance		75	Ω
RF output level	2	≥95	dB μ V
Optical link loss auto compensation range		0~-3	dBm
Output level adjustment range		±3	dB
Output slope adjustment range		0~+6	dB
RF test point		-20	dB
Link performance	3,4		
Power dissipation		<18	W
Operation environmental temperature		0~50	°C
Dimensions		40.5×118.5×424	mm
Weight		1.5	kg

- Notes
- 1: If users do not select optical connector, we provide SC/APC
 - 2: Being tested while 59 PAL Optical modulation OMI=3.6%
 - 3: According to TXA optical transmission modules' performance table
 - 4: The way of testing is according to <GY/T143-2000>standard