SL-TranScend

Forward Path Receiver Modules

Forward Path Receiver
(front view)

Key Benefits

- The TSD-FRX series are high performance receivers for forward path applications
- Four modules can be housed in a single SL-TranScend TSD-CH-DC chassis enabling four forward paths to be hosted in 1RU
- The TSD-CH-DC can be mounted on top of each other

Forward Path Receiver (front view)

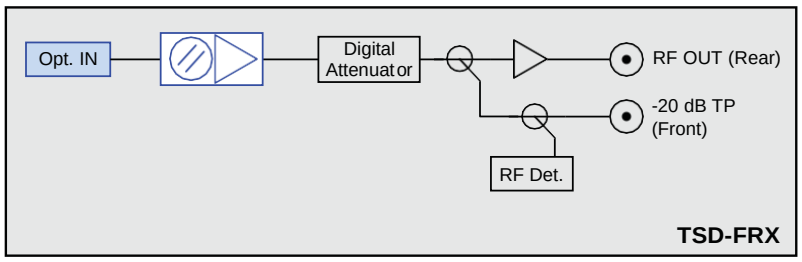
Applications

SEALIGHT's forward receivers have been deployed for numerousapplications to receive forward traffic at the hubsite.

- Distribution networks
- FTTx networks
- Long haul super-trunking

Features

- Optical input range -10 to +1 dBm
- RF output adjustment
- Front panel RF test point
- Hardened -20°C to +75°C version available
- SNMP remote monitoring



Functional Schematic

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Specifications

Forward Path Receiver Module

OPTICAL INPUT		
WAVELENGTH		1200-1620nm
POWER		-10 to +1 dBm
EIN	**54 MHz - 1 GHz**	5 pA/√Hz
	1-1.2 GHz	6 pA/√Hz
RF OUTPUT		
BANDWIDTH		55-1218 MHz
POWER PER ANALOG[1][2]		< 41 dBmV
RETURN LOSS		> 16 dB
FLATNESS		± 1 dB
GAIN SLOPE		± 1 dB
GAIN ADJUST		0.5 dB Steps
GAIN/ATTENUATION RANGE		10/20 dB from Nominal Set Point
TEST POINT		-20 ± 1 dB
PERFORMANCE (@ -3 dBm IN, 79An + 450 MHz DIGITAL)[2]		
RF OUTPUT		38 dBmV
CTB		< -85 dBc
CSO		< -69 dBc
CIN		< -75 dBc
CNR		> 75 dBc
POWER / MECHANICAL		
POWER CONSUMPTION		< 10W
ENVIRONMENTAL		
OPERATING TEMPERATURE	**STANDARD**	0°C to +50°C (+32°F to +122°F)
	HARDENED	-20°C to +75°C (-4°F to +167°F)
STORAGE TEMPERATURE		-40°C to +85°C (-40°F to +185°F)
OPERATING HUMIDITY		5-85% Non-condensing
PHYSICAL		
DIMENSIONS		1.63"H x 2.75"W x 10.38"D (4.14H x 7.0W x 26.37D cm)
WEIGHT		0.9 lbs (0.4 kg)

NOTES:
(1) Maximum analog channel output. Tested with 0 dBm input & 3.9% OMI.
(2) 79 NTSC An + 450 MHz simulated digital load at -6 dB relative to analog. Reference transmitter used was Chromadigm CHS.

Ordering Information

Part Number	Description
SL-TSD-FRX-C	TranScend 54-1218 MHz Forward Optical Receiver, SC/APC Input, F(f) Output in a Single-slot TranScend Module.