

# VL-FTX 1310nm Forward Transmitter

## Description

The VL-FTX series is a high performance 1310nm DFB laser transmitter module and ideal for broadcast and narrowcast applications in optical transportation. The modules can provide a wide range of optical output power to deliver both analog and digital signals. High performance, advanced pre-distortion circuitry achieves superior CSO and CTB. All configuration parameters of modules can be monitored by LED screens on the front panel of the module, or by the VL-EMS equipment management module. The VL-FTX module can be operated also by AGC or MGC modes. These modes can be set up on the front panel.



## Specifications

Parameter	Unit	Specification	Note
<b>Optical Performance</b>			
Wavelength	nm	1310 +/-20	--
Output power	mW	6/8/10/13/16/20	--
Connector	--	SC/APC	--
<b>RF Performance</b>			
Bandwidth	MHz	50-1003	--
Return loss	-dB	≥16	--
Input level	dBmV	15+/-4 27+/-4	Broadband Narrowband
Impedance	ohm	75	--
Flatness	dB	+/-0.75	--
Connector		F-female	--
Test point	dB	-20+/-1 -32+/-1	Broadband Narrowband
<b>Link Performance</b> 15km fiber + attenuator, receive power -1dBm (77 NTSC channels)			
CSO	dBc	≤-63	--
CTB	dBc	≤-67	--
XMOD	dBc	≤-65	--
<b>Electrical/Physical Performance</b>			
Supply voltage	VDC	24	--
Power consumption	W	<12.5	--
Dimensions	mm	395D x 24W x 128H	--
Weight	Kg	1.2	--

## Features

- High performance distributed feedback (DFB) laser with pre-distortion circuit
- Hot-swap capability
- Bandwidth 50~1003MHz
- 6/8/10/13/16/20 mW optical output power
- Automatic/manual gain control (AGC/MGC)
- Broadband and narrowband input
- RF input test point
- Short circuit protection

## CNR

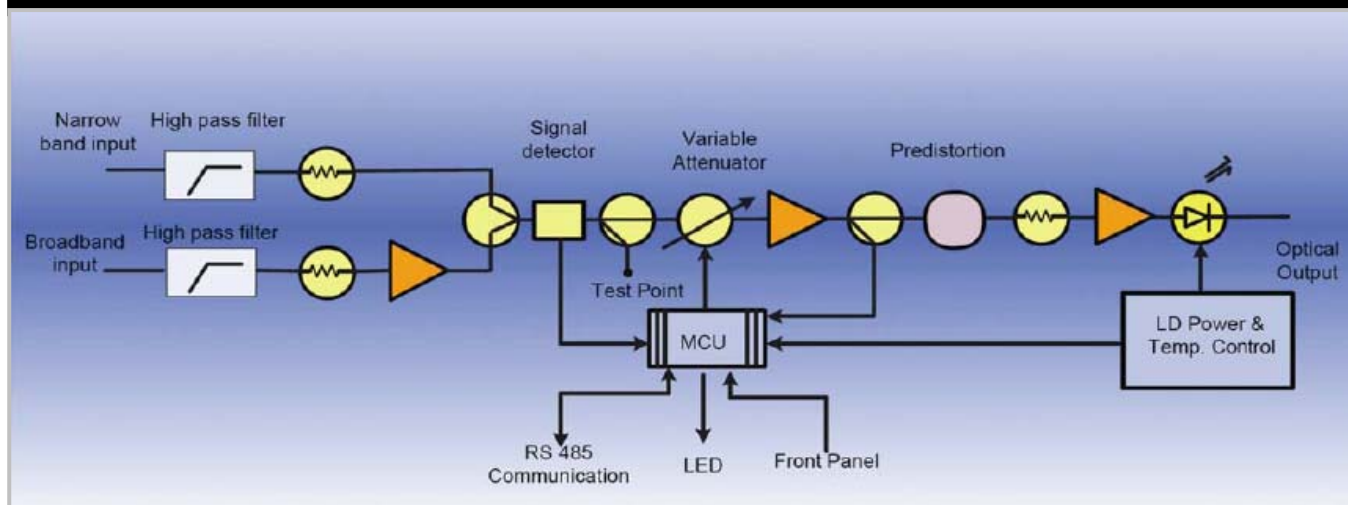
Power Loss	07	08	09	10	11	12	13	14	15
06mW	53	52	51	50					
08mW		53	52	51	50				
10mW			53	52	51	50			
13mW				53	52	51	50		
16mW					53	52	51	50	
20mW						53	52	51	50

# Absolute Maximum Ratings

Stresses in excess of the absolute maximum ratings can cause permanent damage to the device. These are absolute stress ratings only. Functional operation of the device is not implied at these conditions. Exposure to absolute maximum ratings for extended periods can adversely affect device reliability.

Parameter	Symbol	Unit	Min	Max
Operating temperature	Top	°C	0	50
Storage temperature	Tstg	°C	-40	70
Humidity	H	%		85, non-condensing

## Block Diagram



## Ordering Information

VL-FTX-1310-3	--	XX	--	XXX	--	XX
		Optical power: 08 = 8dBm 09 = 9dBm 10 = 10dBm 11 = 11dBm 12 = 12dBm 13 = 13dBm		Connector: SCA = SC/APC		Customer specify