

# VS1310TX 1310nm Forward Transmitter

## Description



The standard rack-mounted VS1310TX series 1310nm optical transmitters are designed for HFC and fiber to the home (FTTH) network application at present and in the future. These AM modulated transmitters have a wide bandwidth from 45 to 870MHz and can be used for both analog and digital signals transmission. The VS1310TX series transmitters employ high performance 1310nm MQW DFB lasers with integrated optical isolator. These lasers operate at a wide range of optical output power (from 6 to 20mW), providing system designers a flexible loss budgets.

The VS1310TX series feature on integrated advanced pre-distortion circuit which achieves superior CSO and CTB performance. The embedded MCU circuit monitors and controls full status parameters and remote communication. All parameters can be accessed through front panel LCD or RS485 interface located on the rear panel of the transmitter.

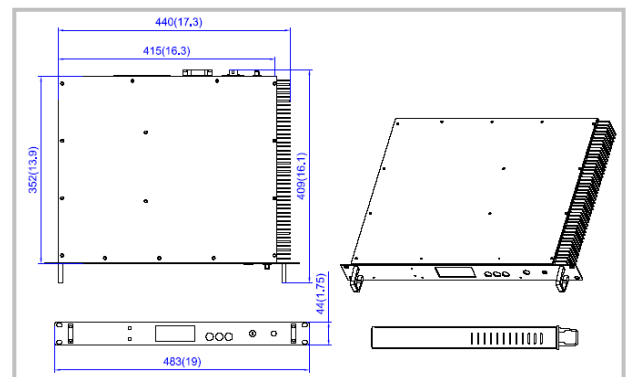
## Specifications

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	45-870	--
Return loss	-dB	≥16	--
Input level	dBmV	15+/-5 27+/-5	--
Impedance	ohm	75	--
Flatness	dB	+/-0.75	--
Connector		F-female	--
Test point	dB	-20+/-1 -32+/-1	--
<b>Link Performance</b> 15km fiber + attenuator, receiver optical power -1dBm (77 NTSC channels)			
CNR	dB	>51	--
CSO	dBc	≤-63	--
CTB	dBc	≤-67	--
XMOD	dBc	≤-65	--
<b>Electrical/Physical Performance</b>			
Supply voltage	VAC	90-264	50/60Hz
Power consumption	W	<20	--
Dimensions	mm	409D x 483W x 44H	--
Weight	Kg	4.8	--

## Features

- High performance cooled DFB laser with integrated optical isolator
- 19" standard 1U rack design
- Bandwidth 45~870MHz
- 6/8/10/13/16/20 mW optical output power
- Automatic/manual gain control (AGC/MGC)
- RF input test point
- LCD display/control functions
- LED status indicator lights

## Dimensions [Unit:mm]

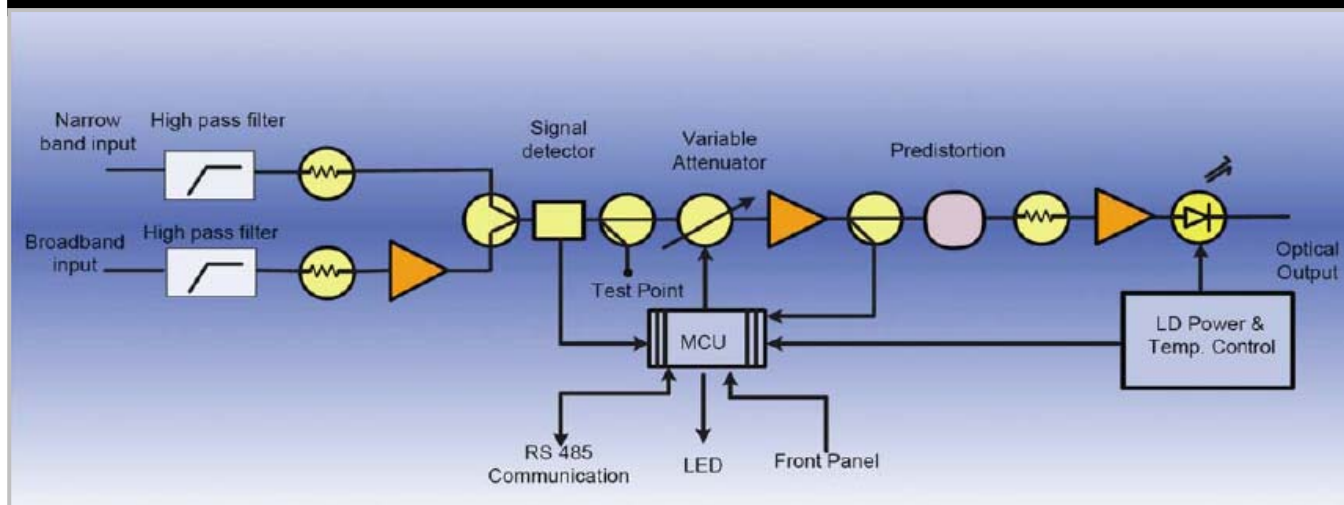


# Absolute Maximum Ratings

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	-20	70
Humidity	H	%		85, non-condensing

## Block Diagram



## Ordering Information

VS1310TX	--	XX	--	XX	--	XX
		Power: 08 = 08dBm 09 = 09dBm 10 = 10dBm 11 = 11dBm 12 = 12dBm 13 = 13dBm		Connector: SA = SC/APC FA = FC/APC		Customer specify