Head-End Equipment

19” Satellite & CATV 1310nm Transmitter

OCDBS-T-X

Product Description

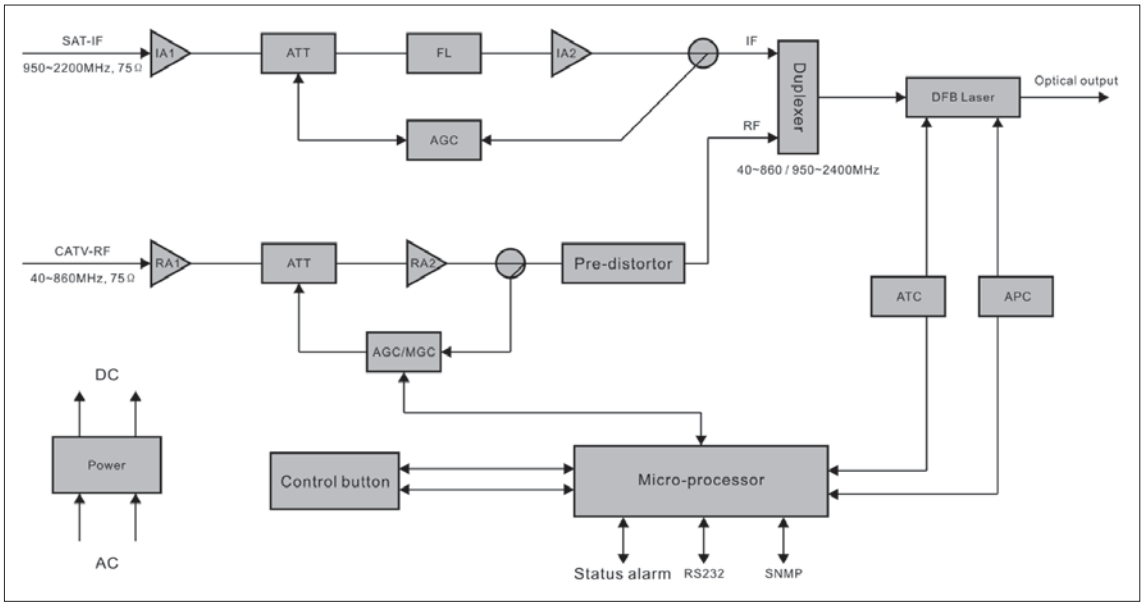
The Optical DFB laser Transmitter OCDBS-T is designed for advanced broadband networks, to cover all applications in the field of satellite communication and cable networks.
The Transmitter converts multichannel CATV together with SAT-IF video signals to optical output at 1310nm. This combined structure enables to minimize the amount of equipment in the H.E., transferring the signal in only one fiber, thus saving in infrastructure cost and maintenance.

Features

- Easy Installation
- Wavelength options: 1310nm, 1550nm, CWDM
- Automatic Gain Control (AGC)
- Tx with supply +12VDC & +18VDC to LNB

Application

- Satellite & CATV distribution
- FTTH for DVB-S (SAT-IF)
- Shared set of satellite receiving antenna



Functional Diagram

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■ Product Specifications

Features	Parameter	Unit	index	Comments
Optical	Wavelength	nm	1310±10	1550, CWDM *1
	Optical Output	dBm	6 ~ 14	
	Return Loss	dB	≥55	
	Output Connector		SC/APC	Optional: FC/APC, LC/APC
	Laser Type		Un-cooling DFB	
RF	Input Frequency Range	MHz	45-862	
	Input Power	dBmV	15~25	AGC
	Return Loss (RL)	dB	>16	
	CNR	dB	≥ 50	
	CTB	dB	≤ -67	
	CSO	dB	≤ -63	
IF	Input Frequency Range	MHz	950 ~ 2400	
	Power range	dBm	-40 ~ -25	TX with AGC
	RF return loss	dB	> 12	
	C/IM3 *2	dB	≥55	
	CNR *3	dB/Hz	>115	
	Link Gain *4	dB	25	
General	RF & IF Input Connector		F female	
	Impedance	Ω	75	
	Network Management Interface		RJ45, RS232	Supports IE, SNMP
	Input Voltage *5		90~265VAC 50/60Hz	
	Power Consumption	W	≤50	
	Operating Temperature	ºC	0 ~ 50	
	Storage Temperature	ºC	-40 ~ 60	
	Relative Humidity	%	5 ~ 95	Non-condensing
	Size WxDxH	Inch	19×10×1.75	

Notes:
*1 CWDM wavelength option: 1470 ~ 1610nm
*2 C/IM3 defined as the ratio of a signal over the third distortion (IM3) by using a two-tone test (1.0GHz & 1.1GHz)
*3 Tested by connecting the transmitter and receiver with a short fiber (back to back operation)
*4 Tested at RF input of -40dBm
*5 Option for -48 VDC

■ Ordering Information

OCDBS-T - A-B-C

A) Output Power (dBm)	B) Optical Wavelength (nm)	C) Connector
06	1 = 1310	1 = SC/APC
08	2 = 1550	2 = FC/APC
09	3 = 1470	3 = LC/APC
10	4 = 1490	
11	5 = 1510	
12	6 = 1530	
13	7 = 1570	
14	8 = 1590	
	9 = 1610	

* Specifications are subject to change without notice
* Ver 2.0