

Lightem CATV & SAT IF Indoor Transmitter 1310nm

LCST3DM is a cost effective CATV & SAT IF Direct modulated Transmitter designed for short and midrange transmissions, It is made by high linearity DFB laser, build-in pre-distortion adjustment circuit and laser APC, ATC closed loop control circuit. All the operating parameters are controlled by micro-processor, the LCD screen on the front panel can display relative operating status and the fault information.



FEATURES

- High linearity, suitable for CATV & SAT-IF application
- Wide band: 47~862MHz & 950~2600MHz
- It can receive analogue CATV and SAT-IF signal over single fiberr
- 1310nm TX, output power upto 30mW
- 1550nm TX, ITU Standard wavelength tunable
- 1550nm TX can be amplified by EDFA, YEDFA to cover large-scaled FTTH, compatible with any FTTx PON technology
- Optical transmitter SAT-IF adopts high-linearity IF drive amplifying circuit with AGC function, TG type. Or optionally, Non-IF amplifying circuit, TO type. TO type can accept high level input
- Optical transmitter offers LNB +13VDC or +18VDC
- Excellent P2P ratio

SPECIFICATIONS

Optical feature		Min		Max	Supplement
Operating wavelength	nm	1300	1310	1320	13
		1540	1550	1563	CC
		1528		1543	CB
		1528		1563	XX ITU Standard wavelength tunable
Wavelength adjustable range		-1.6		+1.6	XX ITU Standard wavelength tunable
Wavelength adjustable mode	nm		In steps ±0.01nm		XX ITU Standard wavelength tunable
Wavelength stability	Pm/°C	-1		0	TC=20~70°C
Equivalent noise temperature	dB/Hz			-155	
Side mode suppression ratio	dB	35			
Optical isolation	dB	30			
Extinction ratio	dB	10			
SBS	dBm	16			1310nm
		18			1550nm
Optical output power	mW	8		30	1310nm
		4		10	1550nm
Return loss	dB	50			
Optical connector					SC/APC & LC/APC
RF feature					
Operating bandwidth	MHz	47		862	
Input level	dBmV	15		25	AGC
Flatness	dB	-0.75		0.75	47~862MHz
Return loss	dB	16			
RF connector					F-female
Input impedance	Ω	75			
CNR	dB	51			1310nm PDL-D/60CH
		50			1550nm PDL-D/60CH
				-65	1310nm
CTB	dB			-63	1550nm

CSO	dB		-63	1310nm
			-58	1550nm ≤600MHz
			-53	1550nm >600MHz
Working bandwidth	HMz	950	2600	
Input range	dBm	-40	-25	TG type, with AGC amplification
			-8	TO type, without IF amplification
Band-in flatness	dB		0.5	40MHz
		-2	2	950-2600MHz
Return loss	dB	10		
Input impedance	Ω	75		
RF connector			F-female	
CNR	dB	28		
CTB	dB		-36	
CSO	dB		-36	
To LNB voltage	V		13/18	
To LNB max current	mA		300	
General feature				
SNMP			RJ45	
Communication interface			RS232	
Power supply	V	90	220	265
Power consumption	W			30
Operating temp.	°C	0		+50
Storage temp.	°C	-40		+85
Humidity	%	5		95
Size (W)×(D)×(H)				483 x 267 x 44 mm

ORDERING INFORMATION

Model	Power (mW)	Bandwidth (MHz)	Technical index (59 channel PAL-D) (dB)				SNMP Network Management
			Link Loss	CNR2	CTB	CSO	
LCST3DM-cc-dd-X	≥4	47~860	7	≥52	≤-67	≤-63	
cc	FA	- FC/APC					
	SA	- SC/APC					
dd	22	- 220V AC					
	11	- 110V AC					
	48	- 48V DC					
	42	- 48V DC & 220V AC					
X:	M						with SNMP Network Management
	N						without SNMP Network Management