

Lightem LCT3DM-ONT series 1310nm Direct Modulated Optical Transmitter

Lightem 1310nm direct modulation optical transmitter, adopts high linearity DFB laser of famous brand in the world, and builds-in perfect pre-distortion adjustment circuit and laser APC, ATC closed loop control circuit. All the operating parameters are controlled by microprocessor, and the LCD screen on the front panel can display relative operating status and the fault information.



FEATURES

- Dual Module RF drive, high efficiency laser pre-distortion adjustment.
- Full-automatically optical Modulation Intensity (OMI) control, AGC & MGC.
- Under AGC status, input range is 78dBuV~88dBuV, system index is optimum.
- Front panel has 20 grade OMI status display (Modulation Depth).
- Dual power supply inside backup. Full-automatically switch.
- Full-automatically control of casing temperature, ensure long life of the laser.
- Automatic fan control when casing temperature reach 45°C
- When casing temperature reach 35°C, the transmitter will shut down automatically
- Dual RF input port.
- AM interface; Input 59 routes PAL-D (47-550MHz).
- Digital interface (-10dB): Input digital video (550-750MHz). Time locked function.

SPECIFICATIONS

Performance	Index	Supplement
Wavelength	1310±10 nm	
Output power	4~24 mW	
Return loss	≥55 dB	
optical fiber connector	SC/APC	Optional FC/APC
RF feature		
Work bandwidth	45-862 MHz	
Input level	15~25 dBmV	AGC
Flatness	≤±0.75 dB	45~862MHz
Return loss	>16 dB	45~750MHz
Input impedance	75 Ω	
RF interface	F type	Optional imperial
Link feature		
Transmit channel	PAL-D/60CH	NTSC/80CH
CNR	≥52 dB	10Km optical fiber, 0dBm receive
CTB	≤-67 dB	
CSO	≤-63 dB	
General feature		
Network management interface	RJ45, RS232	Support I.E. & SNMP
Power supply	90~265VAC V	-48VDC optional(30~60VDC)
Power Consume	≤50 W	Single power works
Work temp.	-5~65 °C	Machine temp. control automatically
Storage temp.	-40~85 °C	
Operating relative humidity	5~95 %	
Size (W)x(D)x(H)	19×10×1.75 "	
	483×254×44 mm	

ORDERING INFORMATION

Model	Power (mW)	Bandwidth (MHz)	Technical index (59 channel PAL-D) (dB)				SNMP Network Management
			Link Loss	CNR2	CTB	CSO	
LCT3DM04-cc-dd	≥4	47~860	7	≥52	≤-67	≤-63	
LCT3DM06-cc-dd	≥6	47~860	9	≥52	≤-67	≤-63	
LCT3DM08-cc-dd	≥8	47~860	10	≥52	≤-67	≤-63	
LCT3DM10-cc-dd	≥10	47~860	11	≥52	≤-67	≤-63	
LCT3DM12-cc-dd	≥12	47~860	12	≥52	≤-67	≤-63	
LCT3DM14-cc-dd	≥14	47~860	12.5	≥52	≤-67	≤-63	
LCT3DM16-cc-dd	≥16	47~860	13	≥52	≤-67	≤-63	
LCT3DM18-cc-dd	≥18	47~860	13.5	≥52	≤-67	≤-63	
LCT3DM20-cc-dd	≥20	47~860	14	≥52	≤-67	≤-63	
LCT3DM22-cc-dd	≥22	47~860	14.5	≥52	≤-67	≤-63	
LCT3DM24-cc-dd	≥24	47~860	15	≥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