

SFT8300

Direct Modulated 1310nm Transmitter with AGC



Product description

SFT8300 direct modulated 1310nm 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 of HT8300 direct modulated 1310nm transmitter are controlled by microprocessor, and the LCD screen on the front panel can display relative operating status and the fault information.

SFT8300 series is designed and produced by absorbing the advantages of all kinds of 1310nm transmitters from both home and abroad. Featured of 1310nm transmitter with high index, multi-function and high reliability, it is suitable for high-end subscribers application.

Product features

- Dual Module RF driver, high efficiency laser pre-distortion adjustment.
- Full-automatic OMI control, AGC & MGC Under AGC status, input level is between 78~88dBuV, and system index is optimum. Under MGC status, input range can be adjusted between 75~90dBuV by the ATT on front panel.
- Front panel has 20 grade OMI status display (Modulation Depth). Under AGC status, within RF range, OMI is always at NOM status. Under MGC status, OMI can be at NOM status by adjusting ATT.
- Built-in dual backup power supplies; Switch full-automatically. One is working, with the other as cool backup (suggested). Both are working at the same time, with one as hot backup. If one is damaged, it will switch to the other full-automatically. Switch time $\leq 10\mu s$.
- Case temperature auto-control, ensure the long life of the laser. Case temperature is monitored and controlled by microprocessor. The display screen shows the actual operation temperature in time. When casing temperature $\geq 45^{\circ}C$, two fans at the back panel will open automatically to make compulsive cooling. When casing temperature $\leq 35^{\circ}C$, the fans will stop automatically to ensure its life-span.
- Dual RF input port.
AM interface – Input 59 routes PAL-D (47-550MHz)
Digital interface (-10dB) – Input digital video (550-750MHz).



Model explanation

SFT83[Output power] – [Connector] [Power Supply]

Product type	SFT	Analogue optical transmitter
Product series	83	1310 nm top type
Output power	04	4 mW
	06	6 mW
	08	8 mW
	10	10 mW
	12	12 mW
	14	14 mW
	16	16 mW
	18	18 mW
	20	20 mW
	22	22 mW
Connector	FA	FA/APC
	SA	SA/APC
	LA	LA/APC
Power supply	22	220 VAC
	48	-48VDC

Technical index

Performance		Index	Supplement	
Optic feature	Wavelength	(nm)	1310±10	
	Output power	(mW)	4~24	
	Return loss	(dB)	≥55	
	Optical fiber connector		SC / APC	Optional FC / APC
RF feature	Work bandwidth	(MHz)	45-862	
	Input level	(dBmV)	15~25	AGC
	Flatness	(dB)	≤±0.75	45~862MHz
	Return loss	(dB)	>16	
	Input impedance	(Ω)	75	
	RF interface	(dB)	F type	Optional imperial
	Link feature	Transmit channel		PAL-D/60CH
CNR		(dB)	≥52	10Km optical fiber, 0dBm receive
CTB		(dB)	≤-70	
CSO		(dB)	≤-63	
General feature	Network management interface		RJ45, RS232	Support I.E. & SNMP
	Power supply	(V)	90~265 VAC	-48VDC optional (30~60VDC)
	Power Consume	(W)	≤50	Single power works
	Work temp.	(°C)	-5~65	Machine temp. control automatically
	Storage temp.	(°C)	-40~85	
	Operating relative humidity	(%)	5~95	
	Size (W)x(D)x(H)		19×14.2×1.75 (")	483×360×44 (mm)

Product series

Model	Power (mW)	Bandwidth (MHz)	59 route PAL-D system index(dB)			
			Link Loss	CNR	CTB	CSO
SFT8304	4	47~860	7	≥52	≤-70	≤-63
SFT8306	6	47~860	9	≥52	≤-70	≤-63
SFT8308	8	47~860	10	≥52	≤-70	≤-63
SFT8310	10	47~862	11	≥52	≤-70	≤-63
SFT8312	12	47~862	12	≥52	≤-70	≤-63
SFT8314	14	47~862	12.5	≥52	≤-70	≤-63
SFT8316	16	47~862	13	≥52	≤-70	≤-63
SFT8318	18	47~862	13.5	≥52	≤-70	≤-63
SFT8320	20	47~862	14	≥52	≤-70	≤-63
SFT8322	22	47~862	14.5	≥52	≤-70	≤-63
SFT8324	24	47~862	15	≥52	≤-70	≤-63