GDS-6816 (47~862MHz & 950~6000MHz)

4-Band SAT-TV & CATV Direct Modulated Optical Transmitter

PRODUCT DESCRIPTION

GDS-6816 series micro-wave Direct Modulated Optical Transmitter, the working broadband is 47~862MHz & 950~6000MHz. By internal frequency overlay, can transmit 4SAT-IF, 4 roads sat TV signals and CATV signal of 47~862MHz with high quality by one fiber.

It can supply high quality of satellite live TV service that come from maximum 4 satellites & CATV service for many users by FTTH, FTTB.

GDS-6816 working wavelength is optional 1310nm or 1550nm. Choose 1550nm working wavelength can use EDFA & EYDFA to realize large area coverage. It is compatible with any FTTx PON technology. Realize multi-way satellite TV, CATV TV and internet integration of three networks.

GDS-6816 can choose 1550nm ITU-T standard wavelength to realize DWDM system application, can transmit 8SAT-TV, 12SAT-TV or 16SAT-T by one fiber.

SAT-IF input signal of GDS-6800 can come from 4 different satellites, and also can come from one satellite′ s 4SAT-IF signal. If adopt one satellite′ s 4SAT-IF, can adopt Quattro LNB 4SAI-IF output tuner, such as LNB-2204.

GDS-6816 adopts high linearity broadband and microwave direct Modulated DFB laser. Excellent laser APC, ATC control, perfect SNMP, RS232 interface. High performance, high flexibility, high reliability and excellent performance price ratio. It is the ideal choice for subscribers.

PRODUCT FEATURES

▶47~862MHz & 950~6000MHz RF working bandwidth

▶Transmit CATV signal& 4SAT-IF overlay signal by one fiber at same time

▶1550nm Can use EDFA,YEDFA, can compatible with any FTTx PON

▶1550nm can select ITU-T standard wavelength, suitable for DWDM systems applications

▶4 SAT-IF input interfaces, all can supply power to LNB, all with +18V or+13V power switching, can realize the choice of horizontal and vertical polarization

▶4 SAT-IF input interfaces, the 2 interfaces are High Band(22KHz), another 2 interfaces are Low Band(0Hz)

▶High linear broadband micro-wave (microwave) direct modulated DFB Laser

▶Laser APC,ATC

▶Telecommunication-grade security and reliability and network management

▶SNMP support remote management and control

▶Excellent performance price ratio in this area

MAIN APPLICATION

▶FTTH, FTTB(CATV & 4 SAT-TV)

▶Triple-play(CATV, 4SAT-TV & Intranet)

TECHNICAL INDEX

Performance				Index			Supplement
				Min.	Typ.	Max.	
Optical feature	Working wavelength		(nm)	1300	1310	1320	13
				1547		1563	CR
				1528		1543	CB
				1528.77		1563.86	XX (ITU standard wavelength)
	Laser type			DFB			
	Laser grade			1M			
	Side mode suppression ratio		(dB)	35	45		
	Equivalent noise intensity		(dB/Hz)	155			
	Output optical power		(dBm)	2		10	
	SBS		(dBm)	18			1550nm, 25KM Fiber
	Return loss		(dB)	40	45		FC/PC, SC/PC
				55	60		FC/APC, SC/APC
	Optical fiber connector			SC/APC			Optional FC/APC, SC/PC, FC/PC
Frequency feature	Frequency IF input	VL	(MHz)	950		1950	
		VH		1100		2150	
		HL		950		1950	
		HH		1100		2150	
	4 SAT-IF superposition working		(MHz)	950		6000	
	In-band gain flatness		(dB)	-2.0		+2.0	
	40MHz gain flatness		(dB)	-0.5		+0.5	
	IM2		(dB)	40			2 tone measurement, OMI=20% per carrier
	IM3		(dB)	40			
	Input level		(dBm)	-60		-22	
	Input impedance		(Ω)		75		
	RF return loss		(dB)	8			
	RF connector type			F-Female			
	The number of SAT-IF input				16		
CATV (RF) feature	Frequency Workig	CATV	(MHz)	47		862	Digital or Analog TV
		DAB		213		854	
		DTT		470		854	
		FM		88		108	
	Input level		(dBmV)	15		28	
	Flatness		(dB)	-1		+1	47~862MHz
	Return loss		(dB)	14			
	Input impedance				75		
	Connector type			F-Female			
	Link feature	Test channel		PAD-D/60CH			
		CNR	(dB)	51			-1dBm receiver
		CTB 1310nm	(dB)			-65	
		CTB 1550nm	(dB)			-63	
		CSO 1310nm	(dB)			-60	
		CSO 1550nm	(dB)			-57	
General feature	SNMP interface			RJ45			
	Communication interface			RS232			
	Power supply	AC	(V)	90	220	265	
		DC		-30	-48	-72	
	Power consume		(W)			25	
	Work temp.		(℃)	-5		+65	
	Storage temp.		(℃)	-40		+85	
	Work relative humidity		(%)	5		95	
	Size		(“)	19 ×13×3.5			(W) x(D)x(H)

MODEL EXPLANATION

GDS – 68 16 – □□ – □□ – □□ – □□

Product type		Operating bandwidth		SAT-IF input number		Output power		Operating wavelength		Connector		Power supply	
GDS	Satellite direct modulated optical transmitter	68	47~862MHz & 950~6000MHz CATV + 4SAT-IF	16	16 ports	02	2dBm	13	1310nm	SA	SC/APC	48	-48VDC
						04	4dBm	CR	1547~1563nm	FA	FC/APC	22	220VAC
		60	950~6000MHz 4SAT-IF			06	6dBm	CB	1528~1543nm	SP	SC/PC	11	110VAC
						08	8dBm	XX	1528~1563nm ITU standard wavelength	FP	FC/PC		
						09	9dBm						
						10	10dBm						