GDS-6000 (950~6000MHz)

4-Band SAT-TV Direct Modulated Optical Transmitter

PRODUCT DESCRIPTION

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

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

GDS-6000 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, internet integration of three networks.

GDS-6000 can choose 1550nm ITU-T standard wavelength to realize DWDM system application, can transmit 8 SAT-TV, 12 SAT-TV or 16 SAT-TV by one fiber.

SAT-IF input signal of GDS-6000 can come from 4 different satellites, and also can come from one satellite's 4 SAT-IF signal. If adopt one satellite's 4 SAT-IF, can adopt Quattro LNB 4 SAI-IF output tuner, such as our LNB2204.

GDS-6000 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

▶950~6000MHz RF working bandwidth

▶Transmit up to 4 satellites' SAT-IF satellite TV 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(4 SAT-TV)

▶Triple-play(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		(dB)	35	45		
	Equivalent noise intensity		(dB/Hz)	155			
	Output optical power		(dBm)	2	6	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		(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				4		
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 ×14.5×1.75			

MODEL EXPLANATION

GDS – 60 □□ – □□ – □□ – □□

Product type		Operating bandwidth		Output power		Operating wavelength		Connector		Power supply	
GDS	Satellite direct modulated optical transmitter	60	950~6000MHz 4SAT-IF	02	2dBm	13	1310nm	SA	SC/APC	48	-48VDC
				04	4dBm	CR	1547~1563nm	FA	FC/APC	22	220VAC
		68	47~862MHz & 950~6000MHz CATV + 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						