

HDS-55S (950~5500MHz)

Direct Modulated Optical Transmitter

PRODUCT DESCRIPTION

HDS-55S series 1550nm wide band micro-wave internal modulation optical transmitter , RF working 950~5450MHz.It can transmit multi(stacker) 4 way SAT-IF signal in one fiber to realize two polarized 4 way SAT-IF signal in one satellite. or 4 way SAT-IF signal in different satellites to convert all of them into one fiber.. Through FTTH , users use ordinary satellite receiver and STB to receive satellite video carrier the integrate TV programs. It can supply high quality of satellite TV service up to 3000 SDTV or 600 HDTV channel.

HDS-55S working wavelength can be chosed 1310nm and 1550nm. 1550nm can choose ITU-T standard wavelength to fit

for DWDM system application. 1550nm working wavelength can choose EDFA. It can compatible with FTTx PON technology.Realize satellite TV, cable television, internet integration of three networks.

HDS-55S adopt high linear bandwidth micro-wave DFB Laser. Excellent laser APC, ATC control, perfect SNMP, RS232 interface, 1+1 power supply backup. High performance, high flexibility, high reliability and excellent performance price ratio. It is the best choice for subscribers.



PRODUCT FEATURES

- ▶ 47~862 & 950~5500MHz RF working bandwidth
- ▶ It adopts frequency-division multiplexing (FDM), and can simultaneously transmit CATV signal and 1-way SAT-IF composite signal 4×(950~5500MHz) through one fiber.
- ▶ Reach up to 3000 SDTV or 600 HDTV channels & CATV to be used at subscribers end at the same time
- ▶ 1550nm selectable ITU-T standard tunable wavelength, suitable for
- ▶ DWDM systems applications
- ▶ Can use EDFA, YEDFA, can compatible with any FTTx PON
- ▶ High linear bandwidth micro-wave (microwave)DFB Laser
- ▶ Laser APC、ATC、AWC
- ▶ All electronic adjustable
- ▶ CATV level AGC control, SAT-IF level MGC control
- ▶ Telecommunication-grade security and reliability and network management
- ▶ SNMP support remote management and control
- ▶ 1+1 power supply back up,up hot-plug function available
- ▶ Excellent performance price ratio in this area

MAIN APPLICATION

- ▶ Satellite-TV FTTH
- ▶ CATV, satellite-TV, Internet, Triple-play
- ▶ Other 900~6000MHz microwave wideband application.

RELATED PRODUCTS

- ▶ Applicable receiver: HRS-55S

TECHNICAL INDEX

Feature			Min.	Typ.	Max.	Supplement
Optical feature	Working wavelength	(nm)	1290	1310	1330	13
			1540	1550	1563	CC
			1528		1543	CB
			1528		1565	XX ITU Standard wavelength tunable
	Wavelength adjustable range	(nm)	-1.6		+1.6	XX ITU Standard wavelength tunable
	Wavelength adjustable mode	(nm)	±0.01 stepping			XX ITU Standard wavelength tunable
	Side mode suppression ratio	(dB)	35	45		
	Equivalent noise intensity	(dB/Hz)	145			To 5500MHz
	Each port output optical power	(dBm)	2		12	1310nm
			2		10	1550nm
	SBS	(dBm)	18			25Km Fiber
	Return loss	(dB)	55	60		APC
	Optical fiber connector		SC/APC			FC/APC, LC/APC optional
RF feature	Work bandwidth	(MHz)	47		862	
	Input level	(dBmV)	15		25	AGC
	Flatness	(dB)	-1		+1	45~862MHz
	Return loss	(dB)	16			45~750MHz
	Input impedance	(Ω)		75		
	RF interface		F type			Optional imperial
	Transmit channel		PAL-D/60CH			-1dBm receive
	CNR	(dB)	50			
	CTB	1310nm	(dB)		-65	
		1550nm	(dB)		-63	
		1310nm	(dB)		-60	

		1550nm	(dB)			-57	
IF feature	Typical application	(MHz)	950			5500	
	frequency response	(dB)	-2			+2	950~5500MHz
	IM2	(dB)	40				2 tone measurement, OMI=20% per carrier
	IM3	(dB)	40				
	Input level	(dBm)			-20		Nominal input level
	Input impedance	(Ω)			50		
	RF return loss	(dB)	8				
	RF connector			SMA-Female			
Complete performance	SNMP interface			RJ45			
	Telecommunication port			RS232			
	Power supply	AC		90	220	265	
		DC	(V)	-30	-48	-72	
	Power loss	(W)				25	
	Working Temp.	(°C)	-5			-65	
	Storage Temp.	(°C)	-40			+85	
	Relative humidity	(%)	5			95	
	Size (W)×(D)×(H)	(")		19×14.5×1.75			

HDS-55S ELECTRICAL FUNCTIONAL BLOCK DIAGRAM



