GRS-5544 (950~5450MHz)

4 SAT-IF Optical Receiver (Built-in 4 * 4 Satellite Switch)

PRODUCT DESCRIPTION

GRS-5544, a kind of 4-band SAT -IF O/E converter, which makes the superposed 4 ways SAT-IF signals in the band 950~5450MHz that transmitted by optic signal cleavage overlay and revert to standard VH,VL, HH, HL 4 ways SAT if signal (SAT-IF), and then pass by the built-in 4 * 4 satellite switch to output 4 way full-channel direct broadcasting satellite TV, and then serve for users.



GRS-5544/WD, GRS-5544/WF, can be compatible with any FTTx PON, to realize internet, Full-Band SAT-TV & CATV Triple-ply network and FTTH

GRS-5544 the forepart of the satellite antenna adopt satellite channel overlay LNB, such as TOL32, TWL01.

The GRS-5544 can be integrated into existing satellite optical networks using Global Invacom wideband LNBs and 1550 nm OTX optical transmitters. Two factory-configured optical input power options are available: Type A: −16 to −7 dBm and Type B: −12 to −3 dBm. Please select the configuration according to the optical input power at the receiver locations and specify it when ordering.

PRODUCT FEATURES

- Four SAT-IF Bands over One Fiber
- Built-in 4×4 Satellite Multiswitch
- Factory-Configured Type A / Type B Input Ranges
- High-Sensitivity Type A for Higher Split Ratios

MAIN APPLICATION

- FTTH Satellite TV Distribution
- Triple-Play DVB-S Overlay
- Four-Band SAT-IF Optical Links
- Receiver Upgrades in Global Invacom OTX Networks

TECHNICAL INDEX

Performance				Index			Supplement
				Min.	Typ.	Max.	
Optical feature	CATV Work Wavelength		(nm)	1260		1620	GRS-5544
				1540		1563	GRS-5544/WF, GRS-5544/WD
	Pass Wavelength		(nm)	1310, 1490			GRS-5544/WD
	Channel Isolation		(dB)	40			
	Optical Input Power Range		(dBm)	-16		-7	Type A
				-12		-3	Type B
	Responsibility		(A/W)	0.85			1310nm
				0.9			1550nm
	Optical 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	Reception Frequency Range	4 Sat-If Converted	(MHz)	950		5450	
		Vl Converted		950		1950	
		Vh Converted		1950		3000	
		Hl Converted		3300		4400	
		Hh Converted		4400		5450	
	Frequency Range Output	Vl	(MHz)	950		1950	
		Vh		1100		2150	
		Hl		950		1950	
		Hh		1100		2150	
	Polarized Control	Vl		13V+0Hz			
		Vh		13V+22KHz			
		Hl		18V+0Hz			
		Hh		18V+22KHz			
	Gain Ripple Across Band		(dB)	-3.0		+3.0	
	Gain Ripple Across 40Mhz		(dB)	-0.5		+0.5	
	Channel Isolation		(dB)		30		
	In Band Spurious Power		(dB)	-25			
	Out Band Spurious Power		(dB)			-60	
	Gain Range		(dB)	-1.0		36	
	Output Level		(dBm)	-65		-25	
	Integrated Phase Noise		(dB)		4.0		1KHz~13KHz
	OIP3		(dB)	+10			
	Output Isolation		(dB)		25		4×4 Satellite Switch
	Output Return Loss		(dB)		10		
	Output Impedance		(Ω)		75		
	RF number of connector output				4		
	RF Connector			F-Female			
General feature	Power Supply (DC)		(V)		+18		
	Power Consume		(mA)			300	
	External Power Supply Input Voltage		(V)	90		265	
	Operating Temp.		(℃)	-30		+60	
	Storage Temp.		(℃)	-40		+70	
	Size		(mm)	143 ×167×27			(W)x(D)x(H)

MODEL EXPLANATION

GRS – 55 4 4 / □ □□ – □□

SAT receiver (O/E convertor)	Work bandwidth		Satellite multi-switch		RF number of outputs		Optical Input Power Range(dBm)		Optical connector		CWDM	
	55	950~5450 MHz	4	With 4×4Mulltiswitch	4	4 satellite outputs	A	−16 to −7	SA	SC/APC	NC	Without
			0	Without	5	4 way satellite 1 Way CATV	B	−12 to −3	FP	FC/APC	WD	Build-in CWDM
									SU	SC/PC	WF	Build-in Filter
									FP	FC/PC		