RFoG6000 RFoG 4 ways return path optical receiver

PRODUCT DESCRIPTION

RFoG6000 series Return Path Receivers are an integral part of two-way RF access networks, converting upstream optical signals into RF signals at the head-end or remote hubs. 4 independent receivers are packaged in a 1RU 19-inch rack-mounted unit, serving 256 RFoG optical network terminals (ONTs). A low-noise receiver design improves noise performance by 4dB or more over typical return receivers. Low noise enables DOCSIS 3.0. -32dBm receives sensitivity, allow upstream PON-bound design, such as: supporting 32 splitting way in 20km, 64 splitting way in 10km.

Two versions of the Return Path Receiver are available. Models with front and rear RF ports fit the cabling requirements of both head-end and remote installations. All receivers are temperature-hardened, allowing installation in any network environment including outside plant sites where temperatures are not controlled. SNMP management along with front panel controls complement the features that optimize the Return Path Receiver for head-end and remote installations.

PRODUCT FEATURES

▶4 or 8 low noise optical receiver, up to -32dBm receive sensitivity.
▶Support 256 RFoG micro-node transceiver
▶Compatible with any technology of FTTx PON: EPON/GEPON, GPON, BPON, DPON
▶Support DOCSIS 3.0, upstream bounded with PON design
▶Optical link pre-budget: supporting 32 splitting way in 20km, 64 splitting way in 10km.
▶Support CW or burst mode operation
▶1200~1620nm band wavelength
▶SNMP network management function
▶RF output level can be adjusted by network
▶Built-in 1+1 backup power, redundant A/B inputs
▶Good performance of resistance to temperature, allow -40~+65℃ operating temperature
▶Simple mode, 19" 1RU mount, contain 4 pcs of independent optical receiver
▶Excellent P/P ratio

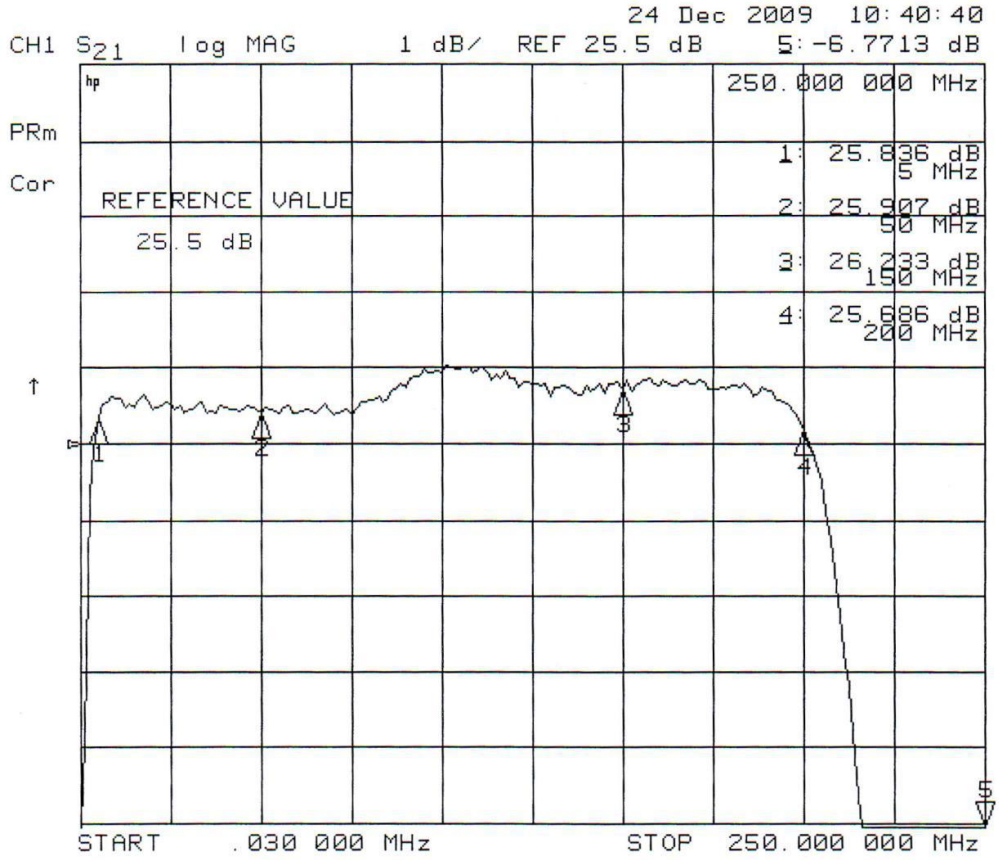
MAIN APPLICATION

▶256 RFoG
▶FTTx PON
▶HFC

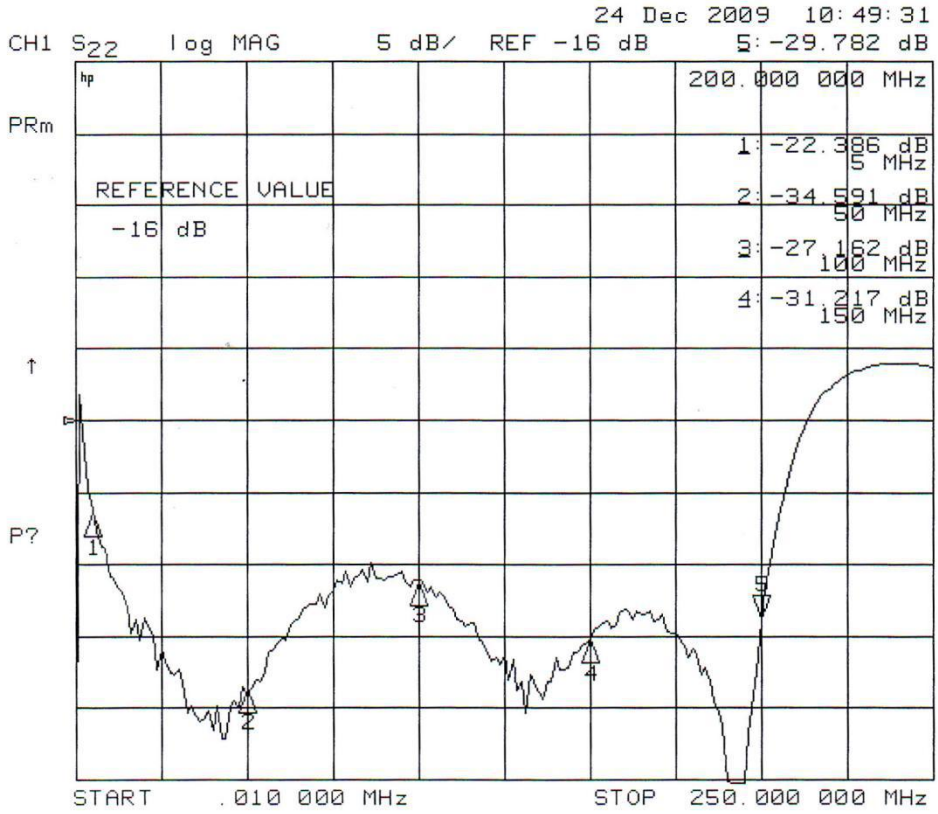
TECHNICAL INDEX

Performance				Index			Supplement
				Min.	Typ.	Max.	
Optical feature	Operating wavelength		(nm)	1200		1620	RFoG1300
	Responsivity	R13	(A/W)	0.85	0.95		1310nm
		R15		0.9	1.0		1550nm
		R16		0.8	0.9		1610nm
	Optical link budget loss		(dB)	29			
	Receiving power	Typical	(dBm)	-29		-13	
		Sensitivity			-34	-32	Pr
		Overload		-7	-5		Po
	Number of optical receiver		(pcs)		4		
	Return loss		(dB)	50			
	Optical connector			SC/APC			LC/APC option
RF feature	Operating bandwidth		(MHz)	5		100	RFoG6100
				5		200	RFoG6200
	RF output level		(dBmV)	30		60	
	RF gain adjustable		(dB)	-30		0	settable=1dB
	Flatness		(dB)	-0.75		+0.75	
	Return loss		(dB)	16			
	RF test point/monitor		(dB)	-20.5	-20	-19.5	
	NPR/Dynamic Range		(dB)	30/10			Pin=-20dB
	Equivalent input noise current		(PA/Hz)			4	5~100MHz
General feature	Power supply	AC	(V)	90	220	265	
		DC		-30	-48	-72	
	Power consume		(W)		12		
	Operating temp.		(℃)	-40		+65	
	Relative humidity		(%)	5		95	
	Size (W)×(D)×(H)		(mm)	483×305×44			

FLATNESS (TEST EQUIPMENT: HP8753D)



RETURN LOSS (TEST EQUIPMENT: HP8753D)



MODEL EXPLANATION

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RFoG Products Serives	Type		Bandwidth		Number of optical receiver		Number of optical transmitter		Whether has LCD on the front panel		SNMP		RF output port position		Optical port position		Connetor		Power supply	
	6	6000 Series Return Path Optical Receivers	1	100MHz	4	4 pcs	0	None	A	With LCD	O	Without	F	Front panel	F	Front panel	SA	SC/APC	22	220VAC
			2	200MHz			1	1 pcs	B	Without LCD	N	With	B	Back panel	B	Back panel	FA	FC/APC	11	110VAC
																	LA	LC/APC	48	-48VDC