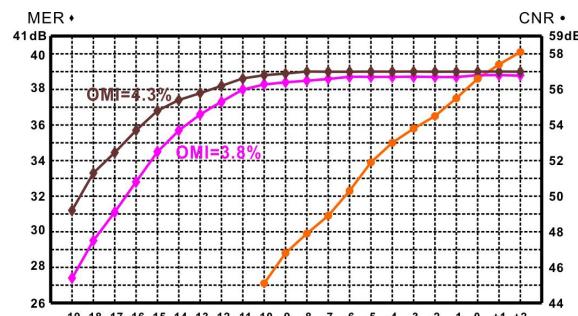


7.0 PRODUCT SERIES

Model	Input wavelength	CATV Operating wavelength	Data pass wavelength	Fiber connector	From
H9112G	1310 or 1550nm	1260~1620nm	-	SC/APC	A-Type
H9112G/WF	1310, 1490/1550nm	1540~1563nm	-	SC/APC	
H9112G/WD	1310, 1490/1550nm	1540~1563nm	1310/1490nm	LC/APC	

8.0 CNR, MER DEGRADATION TABLE**9.0 MODEL EXPLANATION**

H		9	1	12	G /	□ □	-	□	-	□ □
FTTx	Receiver	Work bandwidth	Number of RF output	Output level (Pin=-9dBm)	ALC (AGC)	CWDM	Exterior	Optical connector		
H	FTTH	9 47~862MHz	1 1ports	12 12dBmV(72dB μ V)	NC Without	A 38x80x20 (mm)	LA LP/APC			
P	FTTP				WD Build-in CWDM	LP LC/UPC				
B	FTTB				WF Build-in Filter	B 50x88x22 (mm)	SA SC/APC			
						SP SC/UPC				

10.0.NOTE

- The power adapter for this equipment: Input 220V, output DC 12V(0.6A)
- Keep the optical connector clean, the bad link will cause too low RF output level
- The built-in RF adjustable attenuator(PAD) of equipment can debug suitable level for system users .User Should not adjust by themselves, to avoid the device damage.

H9112G、H9112G/WD、H9112G/WF**FTTH CATV Optical AGC Receiver****(Pin=-15dBm、Vo≥60dB μ V、MER≥36dB)**

47~862MHz

**H9112G-A****User Manual****Ver. 2.7. en**

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1.0 PRODUCT DESCRIPTION

Huatai H9112G, the operating bandwidth of 47~862MHz, Products with high sensitivity optical receiver tube and Huatai special low noise matching circuit, Whether used in analog television or digital television, have high reception sensitivity and excellent intermodulation distortion index. is a low power, high performance, cost-effective triple play, FTTH CATV AGC optical receiver.

H9112G for Analog TV, in Pin =-10dBm when, Vo ≥ 69dB μ V, CNR ≥ 45dB.

H9112G for Digital TV, in Pin =-15dBm when, Vo ≥ 60dB μ V, MER ≥ 36.8dB.

H9112G for Digital TV, in Pin =-19dBm when, Vo ≥ 53.1dB μ V, MER ≥ 31.2dB.

Triple play, fiber to the home, using the H9112G can save a lot of optical fiber amplifier power resources. For operators, can greatly reduce the cost of building the network. H9112G optical port mode of the following three selection:

H9112G :operating wavelength 1260~1620nm. A - Type

H9112G/WD: Built-in CWDM, suitable for single-fiber triple wavelength system, CATV operating wavelength 1550nm, passwavelength 1310/1490nm, can conveniently connect the ONU of EPON, GPON. B - Type

H9112G/WF: built-in 1310/1490nm filter,suitable for single-fiber triple wavelength system, CATV operating wavelength 1550nm. A - Type

2.0 PRODUCT FEATURE

1. Extra-low noise(3.8% modulate, -10dBm receive, CNR ≥ 45dB)
2. Wide dynamic receiving optical power range: within Pin=-15, MER≥36.8dB
3. Applicable GPON, EPON, compatible with any FTTx PON technology
4. Can save a large number of optical power resource, greatly reduce the network configuration cost
5. In the range of 47~862MHz, all have good flatness (FL ≤± 0.75dB)
6. Metal shell, supply safeguards to opto-electrical sensing device
7. High output level can supply for many users
8. Low power consumption, high cost performance

5.0 TEST DATA(Pin=+2.0dBm~-19dBm)

Pin (dBm)	Vo (dB μ V)	MER	BER		Pin (dBm)	Vo (dB μ V)	MER	BER	
			POST	PER				POST	PER
+2.0	80.6	39.0	<1.0E-9	<1.0E-9	-9.0	72.1	38.9	<1.0E-9	<1.0E-9
+1.0	80.4	39.0	<1.0E-9	<1.0E-9	-10.0	70.9	38.8	<1.0E-9	<1.0E-9
+0.0	80.2	39.0	<1.0E-9	<1.0E-9	-11.0	68.5	38.7	<1.0E-9	<1.0E-9
-1.0	80.1	39.0	<1.0E-9	<1.0E-9	-12.0	66.4	38.2	<1.0E-9	<1.0E-9
-2.0	79.5	39.0	<1.0E-9	<1.0E-9	-13.0	65.2	37.6	<1.0E-9	<1.0E-9
-3.0	79.3	39.0	<1.0E-9	<1.0E-9	-14.0	62.9	37.4	<1.0E-9	<1.0E-9
-4.0	79.0	39.0	<1.0E-9	<1.0E-9	-15.0	60.7	36.8	<1.0E-9	<1.0E-9
-5.0	78.8	39.0	<1.0E-9	<1.0E-9	-16.0	58.7	35.7	<1.0E-9	<1.0E-9
-6.0	78.6	39.0	<1.0E-9	<1.0E-9	-17.0	57.1	34.5	<1.0E-9	<1.0E-9
-7.0	78.2	39.0	<1.0E-9	<1.0E-9	-18.0	55.1	33.3	<1.0E-9	<1.0E-9
-8.0	74.0	39.0	<1.0E-9	<1.0E-9	-19.0	53.1	31.2	<1.0E-9	<1.0E-9

Remark: 1. Test Signal: MER: 39.0 (dB), BER: <1.0E-9,QAM64 4CH;
2. Tx input level: 87dB μ V;3. The Test Frequency: 47~862MHz

6.0 TECHNICAL INDEX

	Performance		Index	Supplement
	CATV Work wavelength	(nm)	1260~1620	H9112G (A-Type)
	Pass wavelength	(nm)	1540~1563	H9112G/WF,H9112G/WD (A & B -Type)
	Channel Isolation	(dB)	≥40	1550nm & 1490nm
Optic feature	Responsivity	(A/W)	≥0.85	1310nm
			≥0.9	1550nm
	Receiving power	(dBm)	+2~10	Analog TV(CNR>45dB)
			+2~19	Digital TV(MER>29dB)
	Optical return loss	(dB)	≥55	
	Optical fiber connector		SC/APC	H9112G, H9112G./WF
			LC/APC	H9112G/WD
RF Feature	Work bandwidth	(MHz)	47~862	
	Flatness	(dB)	≤±0.75	47~862MHz
	Output level	(dB μ V)	>72	AnalogTV (Pin=+2~8dBm)
			>72	Digital TV (Pin=-9dBm)
	Output level adjust	(dB)	0~18	MGC
	AGC character (Δ Vo)		≤±1.0	Pin:+2~8dBm
	Return loss	(dB)	≥14	47~862MHz
	Output impedance	(Ω)	75	
	Output port number		1	
Analog TV Link Feature	RF tie-in		F-Female	
	Test channel	(CH)	59CH(PAL-D)	
	OMI	(%)	3.8	
	CNR1	(dB)	54..6	Pin=-2dBm
	CNR2	(dB)	45.1	Pin=-10dBm
	CTB	(dB)	≤-65	Pin: 0~10dBm
	CSO	(dB)	≤-65	Pin: 0~10dBm
Digital TV Link Feature	OMI	(%)	4.3	
	MER	(dB)	≥36	Pin=-15dBm
			≥29	Pin=-19dBm
	BER	(dB)	<1.0E-9	Pin:+2~19dBm
General feature	Power supply	(V)	DC+12V	±1.0V
	Power Consume	(W)	≤3	+12VDC,210mA
	Work temp	(°C)	-20 ~ +50	
	Storage temp	(°C)	-40 ~ 85	
	Work relative temp	(%)	5 ~ 95	
	Size	(mm)	38×80×20	A -Type
			50×88×22	B -Type