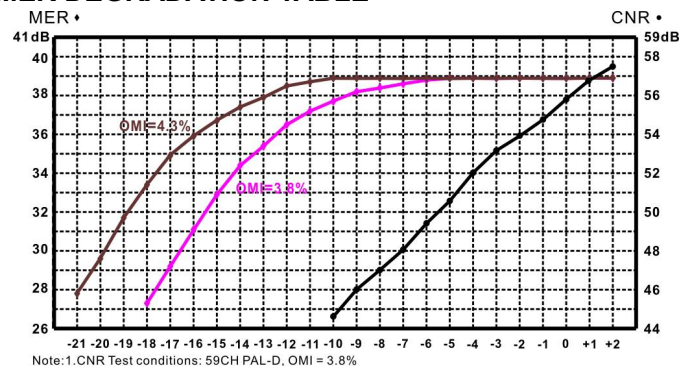


7.0 PRODUCT SERIES

Model	Input wavelength	CATV Operating wavelength	Data pass wavelength	Fiber connector	From
P9134	1310or1550nm	1260~1620nm	-	SC/APC	A -Type
P9134/WF	1310, 1490/1550nm	1540~1563nm	-	SC/APC	
P9134/WD	1310, 1490/1550nm	1540~1563nm	1310/1490nm	LC/APC	B -Type

8.0 CNR, MER DEGRADATION TABLE



Note: 1. CNR Test conditions: 59CH PAL-D, OMI = 3.8%

2. MER test conditions: The Original Signal : MER = 39.0dB, BER < 1.0E-9,

Test Frequency : 47 ~ 862MHz Full Channel, (The Curve is: 858. 00MHz) .

Red curve: OMI=3.8%

Brown curve: OMI=4.3%

3. Digital television Receiving Low Light, appropriate to increase the system modulation (OMI), can greatly improve the MER degradation.

9.0 MODEL EXPLANATION

P 9 1 34 / □ □ - □ - □ □

FTTx receiver	Work bandwidth	RF output ports	Output level (Pin=-6dBm)	CWDM	Exterior	Optical Connector
P FTTP	9 47~862MHz	1 1port	34 34dBmV(94dBμV)	NC Without	A 38×80×20 mm	LA LC/APC
H FTTH				WD Built-in WDM		LR LC/UPC
B FTTB				WF Built-in Filter	B 50×88×22 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.

P9134、P9134/WD、P9134/WF FTTH High Output CATV Receiver (Pin=-6dBm、Vo≥94dBμV、MER≥34dB) 47~862MHz



P9134-A

User Manual

Ver. 2.5. en

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1.0 PRODUCT DESCRIPTION

Huatai P9134, operating bandwidth of 47 ~ 862MHz, regardless of the aircraft used for analog TV or digital TV, both with high receiver sensitivity and excellent intermodulation distortion indicators. At high optical power receiver can adjust the level by PAD, played limiting output, so P9134 at +2 dBm ~-20dBm received optical power of large dynamic the range, have excellent properties:

Analog TV, Pin =-10dBm, Vo ≥ 86dBμV, CNR ≥ 43dB.

Digital TV, Pin =-15dBm, Vo ≥ 84.1dBμV, MER ≥ 36.7dB.

Digital TV, Pin =-20dBm, Vo ≥ 74.8dBμV, MER ≥ 29.6dB.

Triple play, fiber to the home, using the P9134 can save a lot of optical fiber amplifier power resources. For operators, can greatly reduce the cost of building the network .P9134 optical port mode of the following three selection:

P9134 : operating wavelength 1260~1620nm. A - Type

P9134/WD: built-in CWDM, suitable for single-fiber triple wavelength system, CATV operating wavelength 1550nm, pass wavelength 1310/1490nm, can conveniently connect the ONU of EPON, GPON. B- Type

P9134/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 ≥ 43dB)
2. Wide dynamic receiving optical power range: within Pin=-15, MER≥36dB
3. Applicable GPON, EPON, compatible with any FTTx PON technology
4. High Level Output (Pin= -6dBm,Vo≥94dBμV)
5. Within 47~862MHz bandwidth, all with excellent flatness feature (FL±0.75dB)
6. Metal case, offer safeguard for optoelectronic sensitive devices
7. Low consumption, high performance, high reliability
8. Can save a large number of optical power resource, greatly reduce the network configuration cost
9. Excellent cost performance in area

5.0 TEST DATA(Pin= +2.0dBm~-20dBm)

Pin (dBm)	Vo (dBμV)	MER	BER		Pin (dBm)	Vo (dBμV)	MER	BER	
			POST	PER				POST	PER
+2.0	101.6	38.9	<1.0E-9	<1.0E-9	-10.0	94.1	38.9	<1.0E-9	<1.0E-9
+1.0	99.6	38.9	<1.0E-9	<1.0E-9	-11.0	92.0	38.7	<1.0E-9	<1.0E-9
+0.0	97.7	38.9	<1.0E-9	<1.0E-9	-12.0	90.0	38.5	<1.0E-9	<1.0E-9
-1.0	98.5	38.9	<1.0E-9	<1.0E-9	-13.0	88.1	37.9	<1.0E-9	<1.0E-9
-2.0	98.6	38.9	<1.0E-9	<1.0E-9	-14.0	86.4	37.4	<1.0E-9	<1.0E-9
-3.0	98.7	38.9	<1.0E-9	<1.0E-9	-15.0	84.1	36.7	<1.0E-9	<1.0E-9
-4.0	98.7	38.9	<1.0E-9	<1.0E-9	-16.0	82.1	35.9	<1.0E-9	<1.0E-9
-5.0	98.6	38.9	<1.0E-9	<1.0E-9	-17.0	80.4	34.9	<1.0E-9	<1.0E-9
-6.0	98.4	38.9	<1.0E-9	<1.0E-9	-18.0	78.7	33.4	<1.0E-9	<1.0E-9
-7.0	98.5	38.9	<1.0E-9	<1.0E-9	-19.0	76.8	31.7	<1.0E-9	<1.0E-9
-8.0	98.5	38.9	<1.0E-9	<1.0E-9	-20.0	74.8	29.6	<1.0E-9	<1.0E-9
-9.0	96.1	38.9	<1.0E-9	<1.0E-9					

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

3.0 MAIN APPLICATION

1. CATV FTTH
2. Integration of three network
3. FTTH PON

4.0 STATUS INDICATION

1. RED: >+2dBm
2. GREEN: +2~-16dBm
3. ORANGE: -16~-20dBm
4. RED: <-20dBm

6.0 TECHNICAL INDEX

Performance		Index	Supplement
Optic feature	CATV Work wavelength	(nm)	1260~1620 P9134 (A-Type)
			1540~1563 P9134/WF,P9134/WD (A & B -Type)
	Pass wavelength	(nm)	1310, 1490 P9134/WD (B -Type)
	Channel Isolation	(dB)	≥40 1550nm & 1490nm
	Responsivity	(A/W)	≥0.85 1310nm
			≥0.9 1550nm
	Receiving power	(dBm)	+2~-10 Analog TV (CNR>43dB)
+2~-20 Digital TV (MER>29dB)			
Optical return loss	(dB)	≥55	
			SC/APC P9134, P9134./WF
Optical fiber connector		LC/APC P9134/WD	
RF Feature	Work bandwidth	(MHz)	47 ~ 862
	Flatness	(dB)	≤±0.75 47~862MHz
	Output level	(dBμV)	>94 AnalogTV (Pin=-6dBm)
			>82 Digital TV (Pin=-16dBm)
	Output level adjust	(dB)	0~18 MGC
	Return loss	(dB)	≥14 47 ~ 862MHz
	Output impedance	(Ω)	75
Output port number		1	
RF tie-in		F-Female	
Analog TV Link Feature	Test channel	(CH)	59CH(PAL-D)
	OMI	(%)	3.8
	CNR1	(dB)	54..1 Pin=-2dBm
	CNR2	(dB)	45.2 Pin=-10dBm
	CTB	(dB)	≤-65 Pin: 0~-10dBm
DigitalTV Link Feature	CSO	(dB)	≤-65 Pin: 0~-10dBm
	OMI	(%)	4.3
	MER	(dB)	≥36 Pin=-15dBm
			≥29 Pin=-20dBm
	BER	(dB)	<1.0E-9 Pin:+2~-20dBm
General feature	Power supply	(V)	DC+12V ±1.0V
	Power Consume	(W)	≤3 +12VDC,210mA
	Work temp	(°C)	-20 ~ +55
	Storage temp	(°C)	-40 ~ 85
	Work relative temp	(%)	5 ~ 95
	Size	(mm)	38×80×20 A -Type
50×88×22 B -Type			