

H9008B (47~1050MHz)

FTTH CATV O/E Convector

PRODUCT DESCRIPTION

Guangtai H9008B series CATV converter for digital television, fiber to the home. This machine adopts the high sensitivity optical receiving tube, without power supply, no power consumption. When the input optical power output level $P_{in}=-1\text{dBm}$, $V_o=6\text{ dB V}$, can be economically and flexibly apply the integration of three networks, fiber to the home network application. H9008B is in the shape of a light, there are three kinds of optical mode selection:

1.H9008B : CATV operating wavelength 1260~1620nm.

2.H9008B /WF: built-in 1310/1490nm filter,suitable for single-fiber triple wavelength system,CATV Operating wavelength 1550 nm.

3.H9008B /WD: Built-in FWDM, suitable for single-fiber triple wavelength system, CATV operating Wavelength 1550nm, pass wavelength 1310/1490nm, can conveniently connect the ONU of EPON, GPON.



PRODUCT FEATURES

- ▶ No Power required
- ▶ Work bandwidth 45~1050MHz
- ▶ Output Level=68dB μ V ($P_{in}=-1\text{dBm}$)

MAIN APPLICATION

- ▶ CATV FTTH
- ▶ Integration of three networks
- ▶ FTTH PON

TECHNICAL INDEX

Performance			Index	Supplement
Optic feature	CATV work wavelength	(nm)	1260~1620	H9008B
			1540~1563	H9008B/WF, H9008B/WD
	Pass wavelength	(nm)	1310, 1490	H9008B/WD
	Channel Isolation	(dB)	≥40	1550nm & 1490nm
	Responsivity	(A/W)	≥0.85	1310nm
			≥0.9	1550nm
	Receiving power	(dB)	-14 ~+2	Digital TV (MER>29dB)
	Optical return loss	(dB)	≥55	
Optical fiber connector			SC/APC	
RF feature	Work bandwidth	(MHz)	45~1050	
	Output level	(dBμV)	>68	Digital TV(Pin=-1dBm)
	Return loss	(dB)	≥14	47 ~ 862MHz
	Output impedance	(Ω)	75	
	Output port number		1	
	RF tie-in		F-Female	
Digital TV Link feature	OMI	(%)	4.3	
	MER	(dB)	≥38	Pin:+1~-6dBm
			≥30	Pin=-13.0dBm
	BER	(dB)	<1.0E-9	Pin :+2.0~-14dBm
General feature	Work temp	(℃)	-20 ~ +55	
	Storage temp	(℃)	-40 ~ 85	
	Work relative temp	(%)	5 ~ 95	
	Size(W)×(D)×(H)	(mm)	Φ13×28	B Type (Fiber Type)

DIGITAL TV TEST DATA

The Test Frequency : 155MHz

Pin (dBm)	Vo (dBm)	MER	BER	
			POST	PRE
+2.0	77.2	39.0	<1.0E-9	<1.0E-9
+1.0	75.5	38.9	<1.0E-9	<1.0E-9
+0.0	73.7	38.8	<1.0E-9	<1.0E-9
-1.0	71.8	38.9	<1.0E-9	<1.0E-9
-2.0	69.7	38.9	<1.0E-9	<1.0E-9
-3.0	67.7	38.9	<1.0E-9	<1.0E-9
-4.0	65.8	38.9	<1.0E-9	<1.0E-9
-5.0	63.4	38.9	<1.0E-9	<1.0E-9
-6.0	61.3	38.3	<1.0E-9	<1.0E-9
-7.0	59.0	38.1	<1.0E-9	<1.0E-9
-8.0	57.8	37.8	<1.0E-9	<1.0E-9
-9.0	55.6	37.3	<1.0E-9	<1.0E-9
-10.0	53.5	36.1	<1.0E-9	<1.0E-9
-11.0	51.5	35.2	<1.0E-9	<1.0E-9
-12.0	49.3	35.4	<1.0E-9	<1.0E-9
-13.0	47.2	33.8	<1.0E-9	<1.0E-9
-14.0	45.6	32.0	<1.0E-9	<1.0E-9
-15.0	43.9	30.0	<1.0E-9	<1.0E-9
-16.0	41.9	28.0	<1.0E-9	<1.0E-9

The Test Frequency : 858MHz

Pin (dBm)	Vo (dBm)	MER	BER	
			POST	PRE
+2.0	71.2	38.5	<1.0E-9	<1.0E-9
+1.0	69.7	39.0	<1.0E-9	<1.0E-9
+0.0	68.5	39.0	<1.0E-9	<1.0E-9
-1.0	67.7	38.7	<1.0E-9	<1.0E-9
-2.0	66.2	38.8	<1.0E-9	<1.0E-9
-3.0	64.3	38.9	<1.0E-9	<1.0E-9
-4.0	62.2	38.7	<1.0E-9	<1.0E-9
-5.0	60.5	38.3	<1.0E-9	<1.0E-9
-6.0	58.6	38.2	<1.0E-9	<1.0E-9
-7.0	57.5	37.5	<1.0E-9	<1.0E-9
-8.0	55.5	37.2	<1.0E-9	<1.0E-9
-9.0	53.2	36.0	<1.0E-9	<1.0E-9
-10.0	51.2	35.0	<1.0E-9	<1.0E-9
-11.0	49.2	34.9	<1.0E-9	<1.0E-9
-12.0	47.4	33.1	<1.0E-9	<1.0E-9
-13.0	45.4	31.1	<1.0E-9	<1.0E-9
-14.0	43.5	29.0	<1.0E-9	<1.0E-9

Remak : 1. Teat Signal : MER : 39.0 (dB), BER : <1.0E-9.

2. OMI=4.3%

PRODUCT SERIES

Model	Input wavelength	CATV operating wavelength	Data pass wavelength	Input fiber connector	Output fiber connector
H9008B	1310 or 1550nm	1260~1620nm	-	SC/APC	-
H9008B/WF	1310, 1490 / 1550nm	1540~1563nm	-	SC/APC	-
H9008B/WD	1310, 1490 / 1550nm	1540~1563nm	1310/1490nm	SC/APC	SC/UPC

MODEL EXPLANATION

H 90 08 B / □□ - □□ - □□

FTTx Receiver		Product Features		Output level (Pin=-1dBm)		Exterior		CWDM		Output Optical connector		Input Optical connector	
H	FTTH	90	45~1050MHz, FTTH O/E Convertor	08	8dBmV(68dBμV)	B	Fiber Type	NC	Without	SA	SC/APC	SP	SC/UPC
						A	Enamel Type	WD	Build-in FWDM	SP	SC/UPC	SA	SC/APC
						C	Box Type	WF	Build-in Filter	LA	LC/APC	LA	LC/APC
										LP	LC/UPC	LP	LC/UPC