

V8601H-1 Datasheet

1. Description

V8601H-1 is a 1550nm Optical Receiver, which can be used in triple-play applications, it has high performance, lower receiver optical power and lower cost for CATV operators providing high quality and excellent FTTH network solution. Product schematic diagram as below:

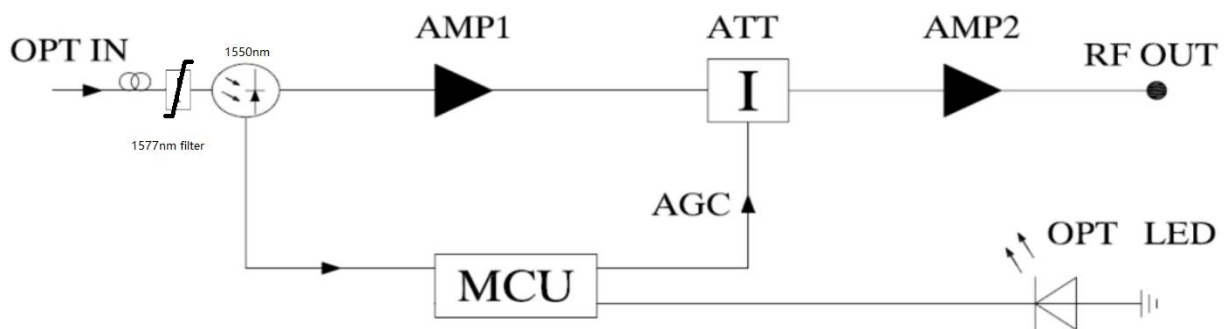


Figure 1 Block Diagram

2. Features

- 1 GHz operating bandwidth
- Lower input optical range:0~-18dBm
- Output level up to $76\pm 2\text{dBuV}$ (-12 to 0dBm input)

- AGC Function(range:0~-15)
- Low power consumption<1.0W

3. Specification

No	Description	value	Unit	Conditions / Notes
1	Wavelength	1550±20	nm	
2	Optical Power Input Range	-18~0	dBm	Recommend -12 to -2
3	Optical Input Return Loss	≥45	dB	
4	Bandwidth	47~1003	MHz	
5	Flatness	±1.0	dB	47~1000MHz, @ 25 °C
6	Slope	0~1.0	dB	47~1000MHz, @ 25 °C
7	Temperature Stability	±1.0	dB	In the operating temperature range (-25 ~ +65 °C)
8	Output Level	76±2	dBuV	-12 to 0dBm input optical power, per channel modulation 3.7%, in the 860MHz point test, @ 25 °C
9	Impedance	75	Ohm	
10	Return Loss (47~1000MHz)	≥14	dB	@25 °C
11	AGC Range	0 ~ -12	dBm	
12	C/N	≥46	dB	@59 PAL CW carrier, 64QAM, 1550nm transmitter +EDFA, 3.7% OMI, 50km optical fiber plus attenuator, -5 dBm optical input power, at 550MHz
13	CTB	≥60	dB	
14	CSO	≥60	dB	
15	MER	≥35	dB	-10~0dBm input optical power
16	Power	< 0.8	W	
17	Operating Temperature	-25~65	°C	
18	Storage Temperature	-40~70	°C	
20	Storage Humidity	≤95	%	Non- condensation
21	Optical Connector Type	SC/APC		FC/ST Optional
22	Power interface	DC12V/1A		External adapter, CE,FCC,UL certification
23	RF Output Connector	F connector		Metric or imperial
24	Dimension	65×80×26	mm	
25	Weight	Net :0.10	kg	Gross weight:0.116

4. AGC Function

Description	Parameter	unit	Conditions / Notes
AGC			
AGC arrange	-15~-0	dBm	
Indicator			
OPT	Three color light	N/A	Optical power <-18dBm, red indicator Optical power -18~2dBm, green indicator Optical power >2dBm, orange indicator

5. Packing List

- One Optical Receiver
- One Power Supply Adapter
- One User Manual

6. Shipping packaging

Description	Quantity	Weight	Carton Size
Shipping packaging	100pcs/ctn	12.28kg/ct	460*410*242mm