

FWR-8610RW WDM Optical Receiver



1. Product Description

The WDM optical receiver is based on HUAWEI and FULLWELL in 2013 to create a smart hotel solution: a convenient, safe and easy-to-maintain network construction solution that carries hotel voice, broadband Internet access, CATV and other information on a single network. With its industry-leading triple play equipment, FULLWELL has produced a series of telecommunication-grade products of WDM optical receiver.

FWR-8610RW WDM optical receiver adopts high isolation and WDM technology to separate CATV and ONU signals, which can meet FTTH requirement of CATV + XPON or XG (S) -PON optical network, receiving 1550nm CATV signal and PON output signals (1310 / 1490nm & 1270 / 1577nm).

FWR-8610RW WDM optical receiver uses high-bandwidth and high-sensitivity photocells, low-noise matching circuits, GaAs amplification, low optical power receiving and RF-AGC technology. Receiving power range from -18 to + 2dBm, Light control AGC: -12~-2dBm, RF rated output 82dBuV, and there is also an optical power receiving monitoring LED indicator ($\geq -15\text{dBm}$) on the panel. Industry-leading 5V power adapter, non-stop work design for more than 5 years, FWR-8610RW is an ideal WDM optical receiver for FTTH single fiber to home network.

2. Product Feature

- ◆ PIN optical receiving power, -1dBm receiving sensitivity, AGC receiving range: -2 ~ -12dBm, output stable level: 82dBuV.
- ◆ Wide bandwidth type: 47 ~ 1000MHz working bandwidth.
- ◆ One fiber can receive long-range CATV RF signals and PON output signals (1310 / 1490nm & 1270 / 1577nm) at the same time.
- ◆ It can be used along with the FULLWELL optical transmitter and WDM EDFA for FTTH triple play transmission and coverage.
- ◆ Industry-leading 5V power adapter, non-stop work design for more than 5 years.
- ◆ Can be compatible with any FTTx PON or customized XGS-PON triple play optical network.
- ◆ Plastic enclosure with white top cover and black base, exquisite texture appearance, to demonstrate brand strength.

3. Technical Parameters

Items	Unit	Parameter	
Input Wavelength	(nm)	1310,1490,1550 (Customized 1270/1577nm)	
Output Wavelength	(nm)	1310,1490 (Customized 1270/1577nm)	
Operation Wavelength	(nm)	1540 ~ 1560	
Channel Separation	(dB)	≥40 (1310/1490nm and 1550nm)	
Responsivity	(A/W)	≥0.9	
Receiving Power Range	(dBm)	+2 ~ -18	
Reflection Loss	(dB)	≥55	
Fiber Link	/	SC/APC	
PON Link	/	SC/UPC (Optional SC/APC)	
Bandwidth/Flatness	MHz/dB	47-1000/≤±1	
Output Level	dBuv	1 RF	AGC: 82±1/(-2 ~ -12dBm)
		2RF(Optional)	AGC: 78±1/(-2 ~ -12dBm)
Adj. Range of Output Level	dB	0 ~ 15(Customized)	
Reflection Loss	dB	≥14(75Ω Characteristic Impedance)	
RF Output Interface	/	1 Way Output Male (or Two-Way Output or Female)	
CNR/MER	dB	≥44/34(PAL-D 60CH, OMI3.8%, -9dBm)	
CTB/CSO/HUM	dB	≥65/≥60/≥60(-1dBm Receive)	
Power Supply/Consumption	V/W	AC100 ~ 240V→DC5/3	
Working/Storage Temperature	°C	-35 ~ 50/-40 ~ 75 (Humidity 5 ~ 90%)	
Dimension	mm	95×92×23	

4. Product Model Series

FWR-8610RW, WDM optical receiver, customized items are as follows:

RF Output Interface	Output Level Adjustable	Model	PON Interface to ONU
1RF	--	FWR-8610RW	SC/UPC (Optional SC/APC)
	ADJ	FWR-8610RW(ADJ)	SC/UPC (Optional SC/APC)
2RF	--	FWR-8610RW(2*RF)	SC/UPC (Optional SC/APC)

