

WR-1082NH WDM FTTH Optical Receiver

1. Product Overview

Plastic housing, indoor optical receiver with WDM, main functions are: with WDM, optical AGC function, with optical power indicator, metal shielding frame for internal RF circuit, power adapter, compact structure, etc., 10GPON wavelength WDM is optional.

2. Features

- Frequency range 45MHz ~1.2GHz.
- Input optical power range -18~0 dBm.
- Optical AGC range -15~-5 dBm
- Low noise MMIC amplification.
- Power consumption is only 2W.
- SC/LC - APC/UPC interface(optional).
- Built-in CWDM, optional G/E PON or 10G/E PON.
- Power adapter optional +5V or +12V.



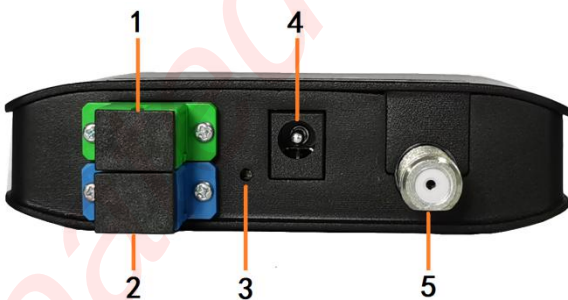
3. Optical Parameters

Item	G/E PON	10 G/E PON
Operating wavelength	1260-1650 nm	1260-1650 nm
CATV wavelength	1540-1560 nm	1540-1560 nm
PON wavelength	1310,1490 nm	1270,1310,1490,1577nm
Insertion loss	<0.7dB	<0.7dB
Isolation Com-Pass	> 35dB @1490	> 35dB @1490,1577
Isolation Ref-Pass	> 35dB @1310	> 35dB @1270,1310
Return loss	>45dB	>45dB
ResponsivitymA/mW	>0.85	>0.85
Connector	SC/APC, SC/UPC, LC/APC, LC/UPC	

4. RF Parameters

	Parameter	Unit	Specification	Remark
RF	Input optical power	dBm	-18 ~0	
	AGC range	dBm	-15 ~ -5	
	Equivalent noise current		≤5 pA/rt(Hz)	
	Frequency Range	MHZ	45 ~1218	
	Flatness	dB	±0.75: 45 ~1003 ±1: 1003 ~1218	Pin: -13dBm
	Return loss	dB	≥14	Pin: -13dBm
	Output level	dBuV	≥80	3.5% OMI / CH, within AGC range
	C/N	dB	≥ 44	-9dBm receiving, 59CH PAL-D, 3.5% OMI / CH
	C/CTB	dB	≥ 58	
	C/CSO	dB	≥ 58	-15dBm receiving, 96CH QAM256, 3.5% OMI / CH
	MER	dB	> 32	
BER		<1E-9		
Others	Power supply	V	DC12V/DC5V	220V,50HZ
	Power supply interface		Inside diameter 2.5mm @DC5V	Round plug, Outer diameter 5.5mm
			Inside diameter 2.1mm @DC12V	
	RF interface		Female/Male F port	
	Power consumption	W	<3	
	ESD	KV	2	
	Operating temperature	°C	-10~+55	
	Operating humidity		95% No condensation	
	Environmental requirements		ROHS 2	
	MTBF		15 years	
	Dimensions	mm	95*60*25 (Excluding optical adapter and RF connector)	
Optical power indicator		Green: -15~0dBm Orange: <-15dBm Red: > 0dBm		

5. Interface Description



	Description
1	COM port, with different optical interface
2	PON port, with different optical interface
3	optical power indication
4	Power adapter input
5	RF output

Note: Please use the factory standard power adapter, it will have damaged risk if using non-standard power adapter.