

WR1095A FTTH Optical Receiver

1 Product Overview

WR1095A optical receiver is a 1GHz FTTH type optical receiver developed to meet the high-quality transmission of digital TV signals. This model has the characteristics of wide range of receiving optical power, high output level, and low power consumption, which can meet the needs of buildings or households. It is an ideal model for building high-performance NGB networks.



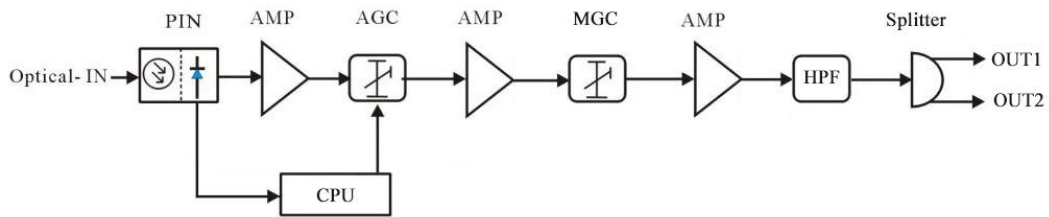
2 Features

- There are two different AGC range options can be for choice.
- Adopts professional low-noise pre-amplifier chips and AGC integrated chips.
- The microprocessor controls the AGC circuit to keep the stability of the output level.
- 0-20dB RF adjustable attenuation makes debugging more convenient.
- Three status LED power indication, two ways RF signal outputs.
- Compact structure and easy to install, it is the preferred equipment for FTTx networks.
- DC5V external low power consumption power supply

3 Technique Parameter

Item	Unit	Technical Specifications	
Optical Parameters			
Optical Wavelength	nm	1100-1650	
Input Optical Power	dBm	-20 ~ +2	
AGC Range	dBm	-15 ~ -5	-12 ~ -2
Return Loss	dB	≥45	
The Max. Optical Power	dBm	+3 (Not damaging the photodetector)	
Optical Connector Type		SC/APC or FC/APC (Optional)	
Fiber Type		Single Mode	
RF Parameters			
Working Frequency	MHz	47-1000	
Maximum RF Output Level	dBuV	90 (@AGC range -15~ -5dBm)	95 (@AGC range -12 ~ -2dBm)
In-band Flatness	dB	±0.75	
CTB	dB	≥60 @84CH, EQ=0dB, OMI=3.5%, Pin=-6dBm	≥60 @42CH, EQ=0dB, OMI=3.15%, Pin=-3dBm
CSO	dB	≥57 @84CH, EQ=0dB, OMI=3.5%, Pin=-6dBm	≥57 @42CH, EQ=0dB, OMI=3.15%, Pin=-3dBm
MER	dB	≥35 @96CH, Pin=-12dBm, OMI=3.5%	≥35 @96CH, Pin=-9dBm, OMI=3.5%
RF Output Stability	dB	±0.75 @Within AGC range	
RF Type		F type Metric or Imperial (Optional)	
General Characteristics			
Working Voltage	V	DC+5V (External power supply)	
Power Consumption	W	≤3	
Protect Grade	-	IP 40	
Operating Temperature	°C	-10~+50	
Dimension(L*W*H)	mm	86×50×22 (Excluding connectors)	

4 Block Diagram



5 Structure Specification



NO.	Description	Note	
1	DC5V Power supply input		
2	Optical signal input connector		
3	0-20dB RF PAD	MGC, can adjust the attenuator value manually	
4	RF output port 2		
5	RF output port1		
6	Optical power indicator (LED indicator)	AGC range is -15~-5dBm Red ON: Pin<-15dBm. Green ON: Within AGC range. Red flash: Pin>-5dBm	AGC range is -12~-2dBm Red ON: Pin<-12dBm. Green ON: Within AGC range. Red flash: Pin>-2dBm