

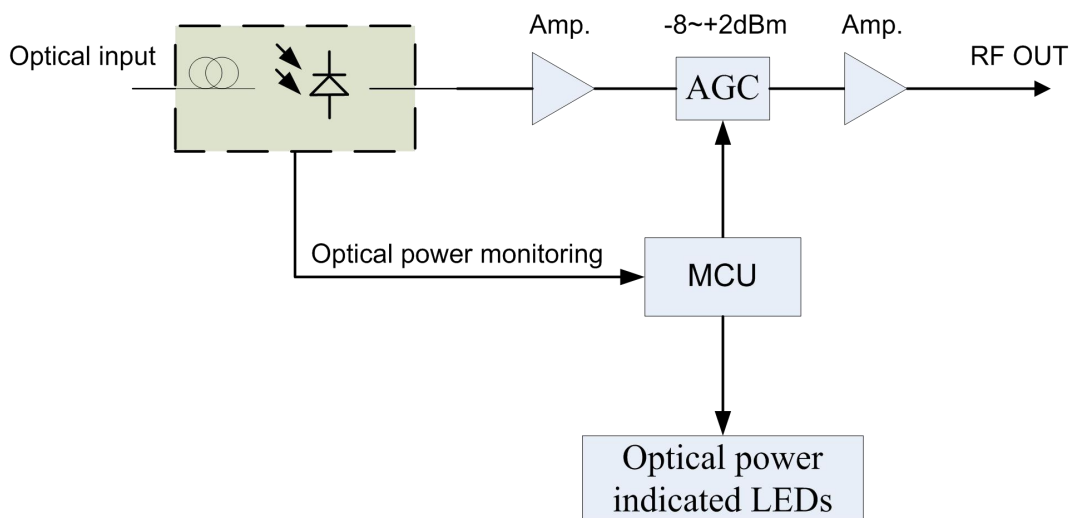
HF100-3311AW FTTH Optical Receiver



Product Overview

The HF100-3311AW is a FTTH optical receiver. The main board holds the photodiode, MMIC amplifiers and AGC circuits. The external mixed optical input port, PON optical output port and RF output port are easy accessible for operations.

Block Diagram



Features

- High quality MMIC amplifier to guarantee high performance
- Wide optical AGC range to ensure stable RF output level

Specification

Parameters	Unit	Value	Notes
Environment Feature			
Storage Temperature Range	℃	-40 ~ +85	
Operating Temperature Range	℃	-10 ~ +50	
Storage Relative Humidity		5%~95%	No Condensation
Optical Feature			
CATV Operation Wavelength	nm	1540~1560	
Isolation Wavelength	nm	1310, 1490	
Optical Isolation	dB	≥ 32	1550&1490nm
Optical Return Loss	dB	≥ 55	
Responsibility	A/W	≥ 0.8	For 1310nm
		≥ 0.9	For 1550nm
Receiving Optical Power	dBm	-18~+3	
Recommended Receiving Optical Power	dBm	-15~+2	
Optical AGC Range	dBm	-12~-2	
Optical Connector Type		SC/APC	
RF Feature			
Impedance	Ω	75	
Work Bandwidth	MHz	47~1000	
Return Loss	dB	≥14	Within work bandwidth range 47~1000MHz
Flatness	dB	≤ ±1.5	

RF Output Level	dBuV	$\geq 80 \pm 1$	Within optical AGC range: $-8 \sim +2$ dBm for 59CH PAL_D analog TV signals, OMI=3.2%.
AGC Control Stability	dB	$\leq \pm 1.0$	Within optical AGC range: $-8 \sim +2$ dBm.
CNR	dB	≥ 50	At optical power -2 dBm for 59CH PAL_D analog TV signals, OMI=3.2%.
C/CSO	dBc	≤ -60	At optical power -2 dBm for 59CH PAL_D analog TV signals, OMI=3.2%.
C/CTB	dBc	≤ -65	At optical power -2 dBm for 59CH PAL_D analog TV signals, OMI=3.2%.
MER	dB	≥ 37	Optical power range from -8 dBm to $+2$ dBm, OMI=3.2%, 93CH 64 QAM digital signals, MER ≥ 40 dB.
BER	dB	$\leq 1.0E-9$	Optical power range from -15 dBm to $+2$ dBm, OMI=3.2%, 93CH 64 QAM digital signals, MER ≥ 40 dB.
RF Connector		F- Female	F- Male optional
RF Output Port Number		1	
LED indicators			
Power Supply Indicator		Green	Green for working, no show is power down.
Input Optical Power Indicators		Green	Input optical power is higher than -16 dBm or lower than $+2$ dBm.
		Red	Input optical power is lower than -16 dBm or higher than $+2$ dBm.
Housing			
Dimension L x W x H	mm	135×90×30	
Weight	Kg	< 0.5	
Power Supply			
Input Voltage Range	VAC	100~240	Frequency 50~60 Hz
Output DC Voltage Range	V	11.4~12.6	
Output DC Current	A	0.5	MAX
Power Consumption	W	< 3	

Order Information

Product Name	Product Model	Descriptions
Optical receiver	HF100-3311AW	With AGC, With WDM, Output level 80dBuV (@ $-8 \sim +2$ dBm@85MHz), Input optical connector SC/APC, Bandwidth1000MHz, Plastic casing,

		External power supply adapter.
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