

# HF100-3301AF

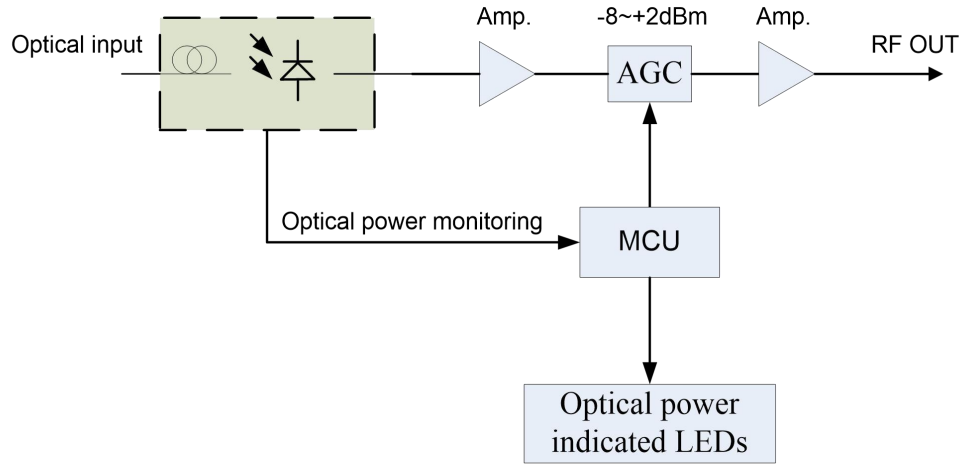
## FTTH Optical Receiver



### Brief Views

The HF100-3301AF is a FTTH optical receiver. The main board holds the photodiode, MMIC amplifiers and AGC circuits. The external optical input port and RF output port are easy accessible for operations.

## Block Diagram



## Features

- Only for 1550 nm optical input
- High quality MMIC amplifier to guarantee high performance
- Wide optical AGC range to ensure stable RF output level

## Specification

Parameters	Unit	Value	Notes
<b>Environment Feature</b>			
Storage Temperature Range	°C	-40 ~ +85	
Operating Temperature Range	°C	-10 ~ +50	
Storage Relative Humidity		5%~95%	No Condensation
<b>Optical Feature</b>			
CATV Operation Wavelength	nm	1540~1563	Filter for CATV 1550nm
Reflective Wavelength	nm	1310, 1490	Internet
Channel Isolation	dB	≥ 32	1550&1490nm

Optical Return Loss	dB	≥ 55	
Responsibility	A/W	≥ 0.8	For 1550nm
		≥ 0.9	
Receiving Optical Power	dBm	-18~+3	
Recommended Receiving Optical Power	dBm	-15~+2	
Optical AGC Range	dBm	-2~-12	
Optical Connector Type		SC/APC	
<b>RF Feature</b>			
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	≥80±1	Within optical AGC range: -2~-12dBm for 59CH PAL_D analog TV signals, OMI=3.2%.
AGC Control Stability	dB	≤ ±1.0	Within optical AGC range: -2~-12dBm.
CNR	dB	≥50	At optical power -2dBm for 59CH PAL_D analog TV signals, OMI=3.2%.
C/CSO	dBc	≤-60	At optical power -2dBm for 59CH PAL_D analog TV signals, OMI=3.2%.
C/CTB	dBc	≤-65	At optical power -2dBm for 59CH PAL_D analog TV signals, OMI=3.2%.
MER	dB	≥37	Optical power range from -8dBm to +2dBm, OMI=3.2%, 93CH 64 QAM digital signals, MER≥40dB.
BER	dB	≤1.0E-9	Optical power range from -15dBm to +2dBm, OMI=3.2%, 93CH 64 QAM digital signals, MER≥40dB.
RF Connector		F-Female	F-male optional
RF Output Port Number		1	
<b>LED indicators</b>			
Power Supply Indicator		Green	Green for working, no show is power down.
Input Optical Power Indicators		Green	Input optical power is higher than -16dBm or lower than +2dBm.
		Red	Input optical power is lower than -16dBm or higher than +2dBm.
<b>Housing</b>			
Dimension L x W x H	mm	78 x 78 x 26	
Weight	Kg	< 0.5	
<b>Power Supply</b>			
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

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Product Name	Product Model	Descriptions
Optical receiver	HF100-3301AF	With AGC, With 1550nm filter, Output level 80dBuV (@-8~+2dBm@85MHz), Input optical connector SC/APC, Bandwidth1000MHz, Plastic casing, External power supply adapter.