

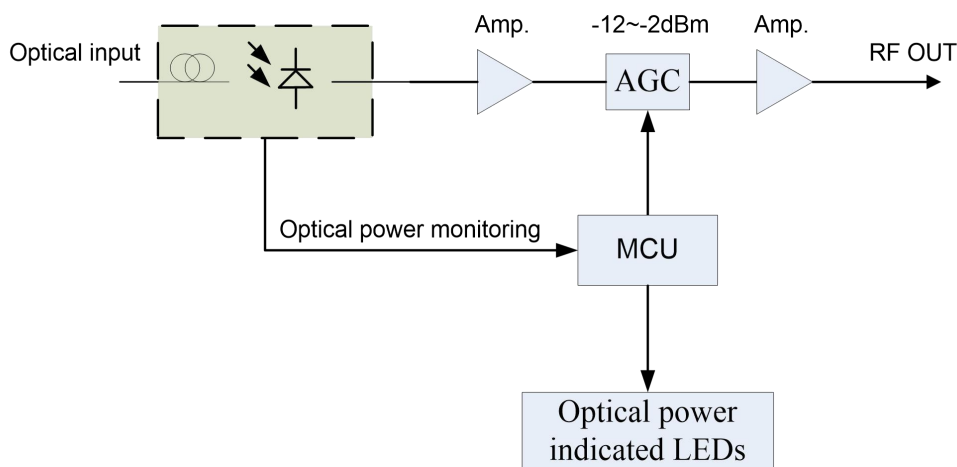
HF3311W-BA-L310 FTTH Optical Receiver



Product Overview

The HF3311W-BA-L310 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.

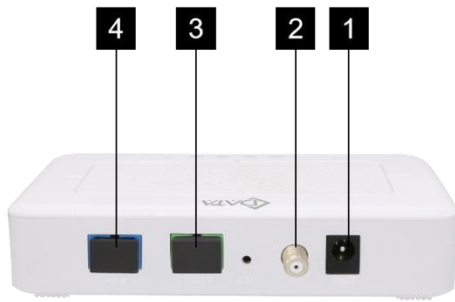
Block Diagram



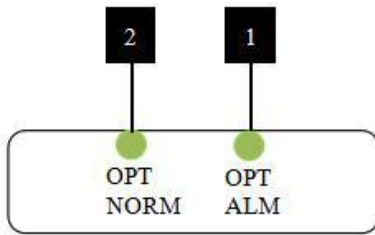
Features

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

Product Interface and LED Definitions



- 1** DC Power Port
- 2** RF Port
- 3** Hybrid Optical Input Port
- 4** PON Optical Output Port



- 1** Receive Optical Power Alarm Port
- 2** Receive Optical Power Alarm Port

Indicator		Description	
1	OPT ALM	Received optical power alarm indicator (red light)	On: The received optical power is lower than -20dBm or higher than +2dBm; Off: The received optical power is higher than -20dBm or lower than +2dBm;
2	OPT NORM	Received optical power normal indicator (green light)	On: The received optical power is higher than -20dBm or lower than +2dBm; Off: The received optical power is lower than -20dBm or higher than +2dBm;

Specification

Item	Parameters	Specification
Optical characteristics	CATV working wavelength	1540~1560nm
	Isolated wavelength	1310nm, 1490nm
	Optical isolation	≥32 dB
	Light reflection loss	≥45 dB
	Responsiveness	≥0.9 A/W, 1550nm
	Received optical power range	-18~0 dBm
	Recommended receiving optical power range	-15~-1 dBm
	Optical AGC range	-12~-2 dBm(default)

	The optical fiber connector	SC/UPC
RF characteristics	impedance	75Ω
	RF bandwidth	47~1000 MHz
	Return Loss	≥14 dB, within the range of 47~1000MHz RF working bandwidth
	flatness	≤±1.5 dB
	Output level	≥80 dBuV, when the optical AGC range: -12~-2dBm, OMI=3.2%, load 59 PAL-D analog TV signals
	Stability of output level under light control AGC	≤±1.0 dB, in the optical AGC range: -12~-2dBm
	CNR	≥42 dB, when the received optical power is -10dBm, OMI=3.2%, load 59 PAL-D analog TV signals
	C/CSO	≤-60 dBc, when the received optical power is -10dBm, OMI=3.2%, load 59 PAL-D analog TV signals
	C/CTB	≤-60dBc, when the received optical power is -10dBm, OMI=3.2%, load 59 PAL-D analog TV signals
	MER	≥32 dB, when the optical AGC range: -12~-2dBm, @load 93 digital signals 64QAM
	BER	≤1.0E-9 dB, when the optical AGC range: -12~-2dBm, @load 93 digital signals 64QAM
	RF connector	British F head, metric F head optional
Physical characteristics	Power	Input power supply: DC 12V/0.5A Power consumption: <3W
	Dimensions	Item size: 125mm(L) x 80mm(W) x28mm (H) Item net weight: <0.5kg
	Environmental	Storage temperature range: -40 ~ +85°C Operating temperature range: -10 ~ +50°C Storage relative humidity: 5%~95% (Non condensation)


Order Information

Product Name	Product Model	Descriptions
Optical receiver	HF3311W-BA-L310	With AGC, With WDM, Output level is over 80dBuV (@-12~-2dBm@85MHz), Input optical connector SC/APC and SC/UPC, Bandwidth1000MHz, Plastic casing, External power supply adapter.