

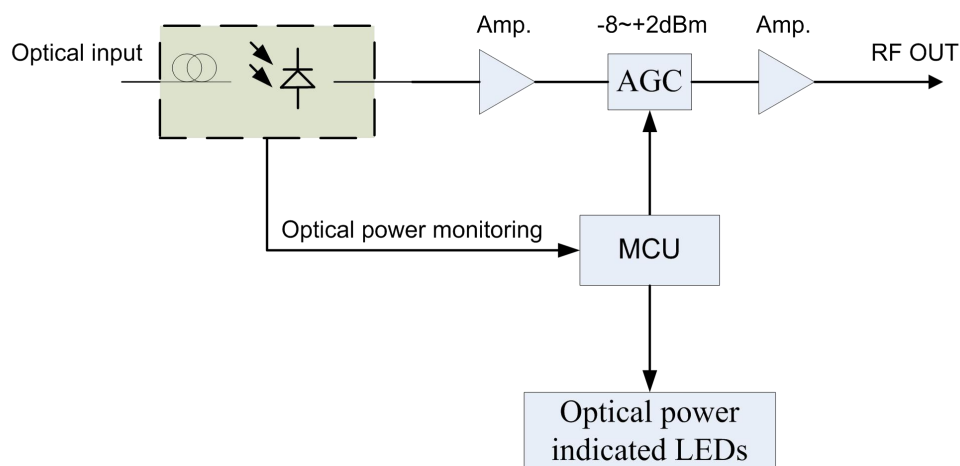
HF100-3301A FTTH Optical Receiver



Product Overview

The HF100-3301A 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

- 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 | 1100~1600 | |
| 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 | -8~+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 | ≥ 80±1 | Within optical AGC range: -8~+2dBm for 59CH PAL_D analog TV signals, OMI=3.2%. |
| AGC Control Stability | dB | ≤ ±1.0 | Within optical AGC range: -8~+2dBm. |
| 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 | |
| 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 -16dBm or lower than +2dBm. |
| | | Red | Input optical power is lower than -16dBm or higher than +2dBm. |
| Housing | | | |
| Dimension L x W x H | mm | 78 x 78 x 26 | |
| 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 | HF100-3301A | With AGC, Output level 80dBuV (@-8~+2dBm@85MHz), Input optical connector SC/APC, Bandwidth1000MHz, Plastic casing, External power supply adapter. |