

Smart Compact Optical Receiver FTTx Solution

AON1110C Series



- **1 GHz forward working frequency**
- **Redundant optical signal inputs**
- **112 dB μ V output @ -7 ~ +2dBm (AGC)**
- **High-performance low power consumption GaAs chip**
- **Electric control circuit for EQ and ATT**
- **Built-in Ethernet transponder**
- **SNMP & Web GUI**

AON1110C Series Optical Receiver is part of ACT's Deep Fiber solution, which has been designed to deliver high-quality CATV and other advanced services. This cost-effective compact mini receiver helps operators expand the bandwidth of their existing HFC network while minimizing capital investment. The AON1110C compact node has smart LED, SNMP, and Web GUI for convenient management and is suitable for MDU, FTTB or FTTC applications with high output up to 112 dB μ V (AGC mode).

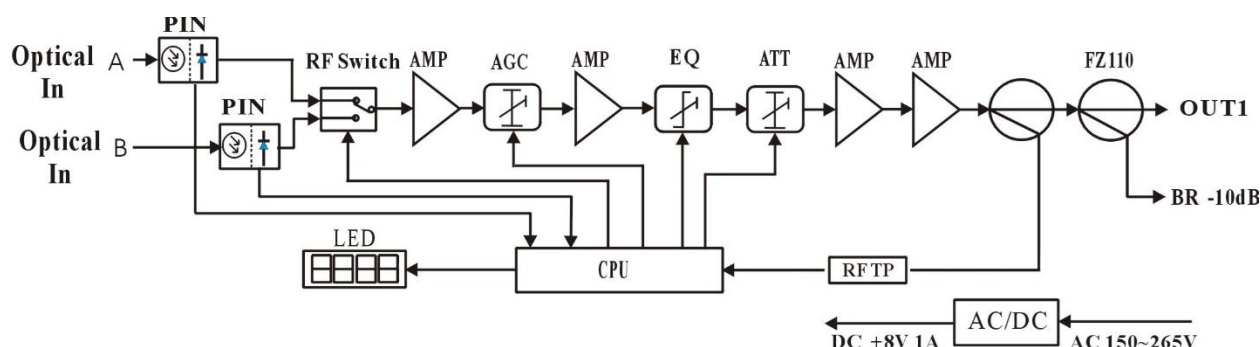
The AON1110C deep fiber node is equipment with Automatic Gain Control circuit to maintain constant output power with optical input from -9 dBm to +2 dBm. Combined with ACT's converged headend AH1000 optical platform, AON1200C series deep fiber optical node is an ideal product to provide MSOs with an economical, flexible HFC access solution.

AON1110C node provides the web management interface to support the remote monitoring capability in advanced network management system.

Key Features

- Utilizes advanced optical AGC technique, optical AGC control range: -9 dBm to +2 dBm adjustable
- Redundant two-way optical signal input, can automatically switch according to the pre-set switching threshold, or manually forced switch
- Forward working frequency extended to 1 GHz, RF amplifier part adopts the high-performance low power consumption GaAs chip, maximum output level up to 112 dBμV
- EQ and ATT both use the professional electric control circuit, make the control more accurate, operation more convenient
- Built-in Ethernet transponder, support remote network management (optional)
The optical output port and network management interface are external or internal (optional)

Block Diagram



End to End Element Management System with Local LED, Web GUI and SNMP

Specifications

Item	Description
Optical Parameters	
Optical Receiving Power	-9 dBm to +2 dBm
Optical Return Loss	>45 dB
Optical Receiving Wavelength	1100 nm to 1600 nm
Optical Connector Type	SC/APC or specified by the user
Fiber Type	Single-mode fiber
Link Performance	
C/N ¹	≥51 dB
C/CTB ¹	≥60 dB
C/CSO ¹	≥60 dB
RF Parameters	
Frequency Range	45 MHz to 862/1003 MHz
Flatness in Band	±0.75 dB
Rated Output Level	108 dBμV
Max Output Level	≥108 dBμV (-9 dBm to +2 dBm optical power receiving) ≥112 dBμV (-7 dBm to +2 dBm optical power receiving)
Output Return Loss	≥16 dB
Output Impedance	75 Ω
Optical AGC Range	(-9/-8/-7 dBm) to (+2 dBm) adjustable
Electrical Control EQ Range	0 dB to 15 dB
Electrical Control ATT Range	0 dB to 15 dB
General Characteristics	
Power Voltage	150 V _{AC} to 265 V _{AC}
Operating Temperature	-40 °C to +60 °C
Consumption	≤8 VA
Dimensions (L×W×H)	190 mm × 110 mm × 52 mm

Note 1: Configure 59 PAL-D analog channel signals at the 550 MHz frequency range. Transmit digital signal at the frequency range of 550 MHz to 862/1003 MHz. The digital signal level (in 8 MHz bandwidth) is 10 dB lower than analog signal carrier level. When the input optical power of the optical receiver is -1 dBm, the output level: 108 dBμV, EQ: 8 dB.

Ordering Information

Product Name	Product Description
AON1110C-0-00-AS-2-1	AON1110C 1 GHz two-way redundant optical receiver with Web GUI and SNMP

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