

Smart Compact Optical Receiver FTTx Solution

AON1110E Series



- **Advanced optical AGC**
- **High performance low power consumption GaAs chip**
- **EQ and ATT both use the professional electric control circuit**
- **Built-in Ethernet transponder**
- **External high-reliability, low-power DC power supply**

AON1110E 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 AON1110E 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 116 dBμV.

The AON1110E deep fiber node is equipped with an 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, AON1110E series deep fiber optical node is an ideal product to provide MSOs with an economical, flexible HFC access solution.

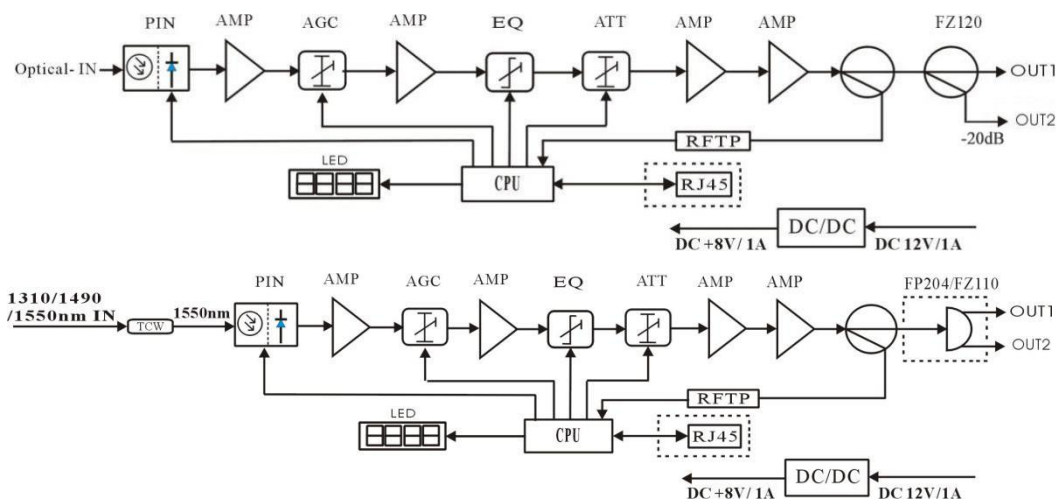
AON1110E node provides the web management interface to support the remote monitoring capability in advanced network management system.

Key Features

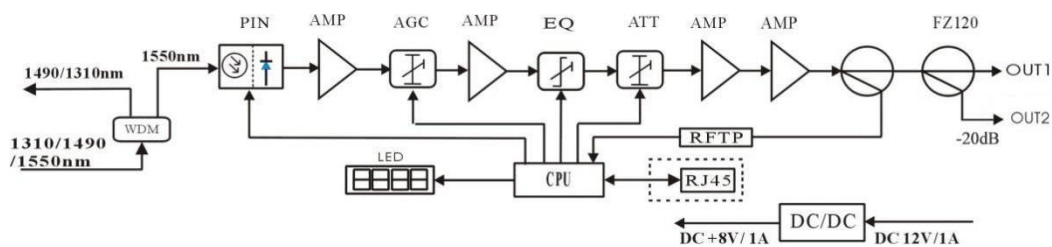
- Adopt advanced optical AGC control technique, the maximum AGC control range(adjustable) is - 9 to + 2dBm
- RF amplifier part adopts the high performance low power consumption GaAs chip, which makes the output level higher
- EQ and ATT both use the professional electric control circuit, make the control more accurate, operation more convenient
- Built-in Ethernet transponder, support remote network management(optional)
- Compact structure, convenient installation, is the first choice equipment of FTTB CATV network
- External high-reliability, low-power DC power supply

Block Diagram

Standard Optical Receiver



Optical Receiver with PON Passthrough



Note: The dashed box indicates the customizable options during ordering.

Specifications

Item	Unit	Technical Parameters	
Optical Parameters			
Receiving Optical Power	dBm	-9 to +2	
Optical Return Loss	dB	>45	
Optical Receiving Wavelength	nm	1100 to 1600 or 1530 to 1620	
Optical Connector Type		SC/APC or FC/APC	
Fiber Type		Single mode	
Link Parameters			
C/N	dB	≥51	42ch, OMI=4.0%, Pin=-2dBm, EQ=9dB,116dBuV@ FZ120 output
C/CTB	dB	≥60	
C/CSO	dB	≥62	
RF Parameters			
Frequency Range	MHz	45 to 862/1003	
Flatness In Band	dB	±0.75(Slope: 5.5±1dB)	
Rated Output Level	dBμV	116(FZ120)	
Max Output Level	dBμV	118(AGC:-7 to +2 tap)	
RF Test Port (OUT2)	dB	-20	
Output Return Loss	dB	≥16	
Output Impedance	Ω	75	
Electrical EQ Control Range	dB	0 to 20(0.5dB step)	
Electrical ATT Control Range	dB	0 to 20(0.5dB step)	
General Characteristics			
Power Voltage	V	DC12V/1A	
Operating Temperature	°C	-20 to 55	
Power Consumption	VA	≤8.5	
Dimension	mm	178(L) x 115(W) x 40(H)	

Ordering Information

Product Name	Product Description
AON1110E-S-00-AS-2-1	AON1110E 1 GHz single input optical receiver, one RF output with Web GUI and SNMP, SC/APC, Main PS 220V, external power adapter

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