Smart Compact Optical Receiver FTTx Solution

AON1210C Series

- 1 GHz forward working frequency
- ≤116 dBμV output
- Advanced optical AGC
- High-performance low power consumption GaAs chip
- Electric control circuit for EQ and ATT
- Built-in Ethernet transponder
- Built-in high reliability low power consumption power supply

AON1210C series one way optical receiver is part of ACT Deep Fiber solution, which has been designed to deliver high quality CATV and other advanced services. The cost-effective receiver platform helps operators expand bandwidth of their existing HFC network while minimizing capital investment. The AON1210C compact receiver 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.

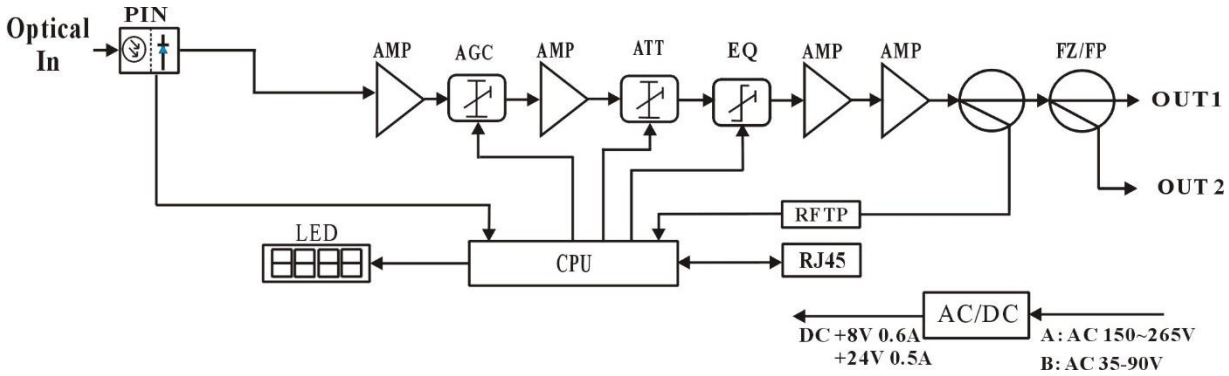
The AON1210C deep fiber receiver is equipment with Automatic Gain Control circuit to maintain constant output power with optical input from -9 to +2dBm. Combined with ACT's converged headend AH1000 optical platform, AON1210C series deep fiber optical receiver is an ideal product to provide MSOs with an economical, flexible HFC access solution.

AON1210C receiver provides the web management interface to support the remote monitoring capability in advanced network management system. With wide range receiving optical power, high output level, low power consumption and compact structure, easy to install. It is the ideal equipment to build the high-performance NGB network.

Key Features

- Adopt advanced optical AGC technique, optical AGC control range: +2 dBm to -9/-8/-7 dBm adjustable
- Forward working frequency extended to 1 GHz, RF amplifier part adopts the high-performance low power consumption GaAs chip, maximum output level up to 116 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)
- Built-in high reliability low power consumption power supply

Block Diagram



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

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	
Optical Connector Type		SC/APC or specified by the user	
Fiber Type		Single mode	
Link Performance			
C/N	dB	≥ 51	EQ 6dB, Output level 108 dBμV (FZ110)
C/CTB	dB	≥ 67	42-channel signal source input, -2dBm
C/CSO	dB	≥ 62	optical power received
RF Parameters			
Frequency Range	MHz	45 to 1003	
Flatness in Band	dB	±0.75	
Rated Output Level	dBμV	≥108	
Max Output Level	dBμV	≥112 (-9 to +2dBm Optical power receiving)	
		≥116 (-7 to +2dBm Optical power receiving)	
Output Return Loss	dB	≥16	
Output Impedance	Ω	75	
Optical AGC Range	dBm	(-9/-8/-7) to (+2) adjustable	
Electrical Control EQ Range	dB	0 to 15	
Electrical Control ATT Range	dB	0 to 15	
General Characteristics			
Power Voltage	V	A: AC (90 to 250)V B: AC (35 to 90)V	
Operating Temperature	℃	-40 to 60	
Consumption	VA	≤18	
Dimension	mm	220(L) * 205(W) * 65(H)	

Note : The forward RF indexes above are tested when adopt NEC module. Use other module, the indexes will be a little different.

Ordering Information

AON1200C Series Optical Receiver Ordering Information

AON12	XXC-	X-	00-	X-	X-	X	X

	Bandwidth
08C	862MHz
10C	1003MHz

	Optical RX
0	Redundant Optical RXs
S	Single Optical RX

	Optical Connector
AS	SC/APC
AF	FC/APC

	Power Supply
1	35 to 90 VAC
2	150 to 265 VAC

	EMS
0	No EMS
1	With EMS

	Optical Connector & EMS RJ45 Position
1	Internal
2	External

Example:

Product Name	Product Description
AON1210C-0-00-AS-2-1-2	AON1210C Outdoor 1 GHz dual inputs redundant optical receiver, Single RF Output, SC/APC connector, External optical conn, 220V AC, Web GUI and SNMP
AON1210C-S-00-AS-1-0-1	AON1210C Fiber Deep Optical Receiver, 1GHz, single Optical input RX, 1x RF Output, Internal optical conn, SC/APC, 35-90VAC, no EMS

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