Mini Node
Deep Fiber
FTTH Solution

AON120D Series

- **Video Overlay for FTTH/PON network (1218MHz)**
- **1310/1490 nm PON wavelength compatible**
- **1270/1577 XGSPON wavelength compatible**
- **-15 dBm to +2 dBm optical receiving range**
- **76 dBµV RF output power with AGC range**
- **LED indicators**
- **Low power consumption**
- **Compact form factor**

AON120D Series FTTH mini node supports Video Overlay application over FTTH optical fiber access network. It operates on 42 MHz to 1218 MHz RF bandwidth, with high output power up to 76 dBµV (AGC). AON120D has low power consumption and optional built-in WDM to support PON signal pass-through. It is part of ACT's Deep Fiber and FTTH solution, which helps operators provide superior video services in a FTTH PON network architecture.

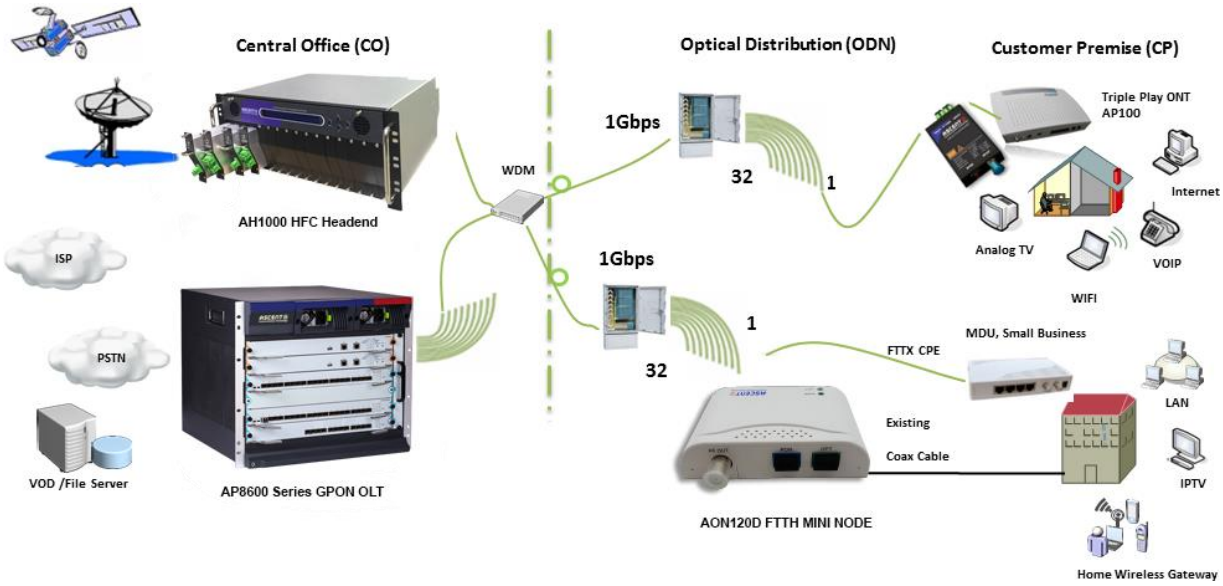
The AON120D Mini Node adopts high sensitivity optical receiver and specially designed low noise matching circuit. The mini node provides high output and is installed at the subscriber premises, suitable for advanced FTTx, high density MDU, SMB, or hospitality market applications. The AON120 mini node is designed with built in WDM optical passive, which will pass the 1310/1490nm PON and 1270/1577nm XGSPON data wavelength to the ONU/ONT CPE device.

With the compact housing, modular design, AON120D mini node provides the flexible configuration for MSOs to deliver advanced video services to their customer. This fiber deep product series improve overall network performance, and offer sufficient bandwidth for new application demand.

Key Features

- 1218 MHz RF Spectrum for superior video services
- Small form factor and low power consumption
- 1310/1490 nm PON wavelength compatible
- 1270/1577 XGSPON wavelength compatible
- Wide optical receiving range: -15 dBm to +2 dBm
- Optical AGC to keep constant output level in different optical input power
- RF output level: 76 dBμV @ -12 dBm optical input power
- LED indicator for optical power and power supply
- Powered directly using the power adaptor
- Compact enclosure fits easily in CPE, ONU housing or network termination boxes
- Special heat dissipation design

Application Diagram



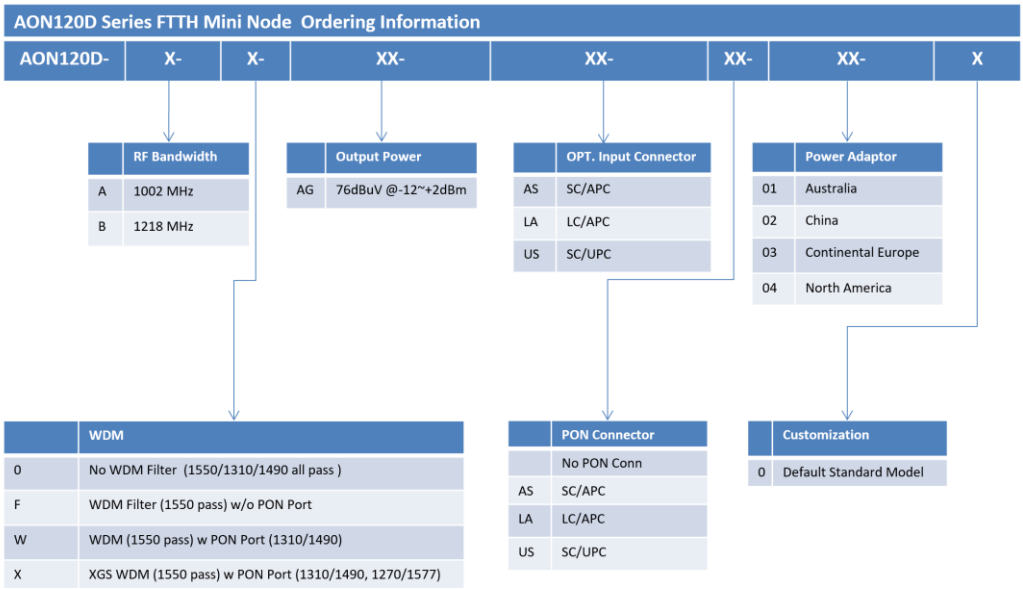
Specifications

AON120D FTTH Deep Fibre Mini Node

Downstream Characteristics (Receiver)

Parameter	Value
CATV Wavelength Range	1260nm to 1620nm (without WDM filter) 1540nm to 1560nm (with WDM filter)
Optical Input Power	-15dBm to +2dBm (AGC: -12 dBm to -2 dBm) >-15dBm (1550 nm LED Green) <-15dBm (1550 nm LED Red)
Optical Return Loss	45dB (typ.)
Responsivity	>0.9A/W @ 1550nm
RF Bandwidth	47 MHz to 1002 MHz, 1218 MHz
Output Level	76dB[iV @ -12dBm to -2dBm (AGC)
RF Flatness	±1.0dB (47 MHz to 1002 MHz)
RF Return Loss	≥16dB
RF Input Impedance	75Ω
RF Connector	F-Female
Link Index	
CNR	43.0dB (-9dBm input, 60 PAL Channels)
CTB	-55dBc
CSO	-55dBc
MER	38dB (-9dBm input, 60 PAL Channels)
General Index	
Optical Connector	SC/APC, SC/APC, LC/APC
Operating Temperature	-10°C to 50°C
Storage Temperature	-40°C to 85°C
Power Supply	+12 V DC
Operating Relative Humidity	5% to 95%
Power Consumption	<2W
Dimensions(W x D x H)	73mm x 60mm x 23mm
Weight	0.2kg
Ship Weight	18kg (Packed in carton boxes of fifty units)

Ordering Information



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