Mini Node Deep Fiber FTTH Solution



AON120D Series

- Video Overlay for FTTH/PON network (1218MHz)
- 1550 nm CATV wavelength
- 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.

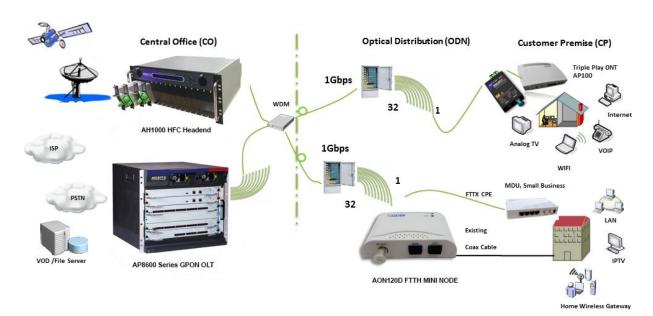
With the compact housing, modular design, AON120D mini node provides the flexible configuration for MSOs to deliver advanced video services to their customer. This fiber deep product series improve overall network performance, and offer sufficient bandwidth for new application demand.

AON120D FTTH Mini Node



Key Features -

- 1218 MHz RF Spectrum for superior video services
- Small form factor and low power consumption
- 1550 nm CATV wavelength
- 1310/1490 nm PON wavelength
- 1270/1577 XGSPON wavelength
- 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

AON120D FTTH Mini Node



Specifications -

Operational Wavelength CATV Wavelength

Reflection Wavelength (Optional)

Insertion Loss (COM to Reflection Port) Channel Isolation @ 1550 nm Channel Isolation @Reflection Band Optical Input Power AGC Range Optical Return Loss Optical Fiber Connector

RF Parameters

Operational Bandwidth Flatness Output Level Return Loss Output Impedance C/N C/CSO C/CTB MER BER Output Port Number RF Tie-in RF

General Characteristics

Power Adapter+12 VDCPower Consumption≤2 WOperating Temperature-10 °C to +50 °CStorage Temperature-40 °C to +85 °COperating Relative Humidity5 % to 95 %Dimensions (L×W×H)73 mm × 60 mm × 23 mm

1260 nm to 1620 nm 1540 nm to 1560 nm 1310 nm (optional, no WDM) 1270 nm to 1530 nm and 1570 nm to 1620 nm ≤1.0 dB ≥30 dB ≥15 dB -15 dBm to +2 dBm -12 dBm to +2 dBm ≥50 dB SC/APC or others SC/PC or others

47 MHz to 1002/1218 MHz ≤±1.0 dB 76 dBµV ± 1 dBµV ≥16 dB 75 Ω ≥43 ≥55 ≥55 ≥34 dB <1.0E-9 1 F-Female Available for GPON 1310/1490 and XGSPON 1270/1577

Reflection port

COM port

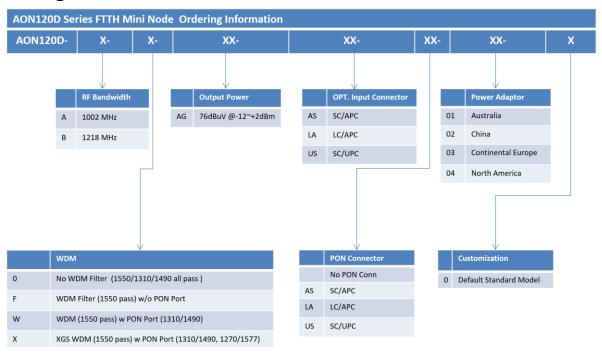
47 MHz to 1002 MHz AGC range 47 MHz to 1002 MHz

-9dBm optical input power, optical input level transmitter 82 dBμV @ 60 PAL, OMI 3.5 % Pin = -12 dBm Pin: 0 dBm to -15 dBm

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Ordering Information



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