

2.6 GHz Optical Rx FTTx Solution

AON120 Series

- 45 MHz to 862 MHz (CATV) & 950 MHz to 2600 MHz (SAT-IF)
- Compact optical receiver design
- Optional WDM for PON pass-through
- Low power consumption
- LED status indicators



Ascent's AON120S 2.6 GHz CATV and SAT-IF Optical Receiver series is a cost-effective high-performance optical network unit which is designed and optimized to work in traditional CATV and satellite applications or for advanced triple play Fiber-to-the-Home (FTTH) architecture networks. The wide RF spectrum supports both the CATV spectrum and satellite IF spectrum up to 2.6GHz.

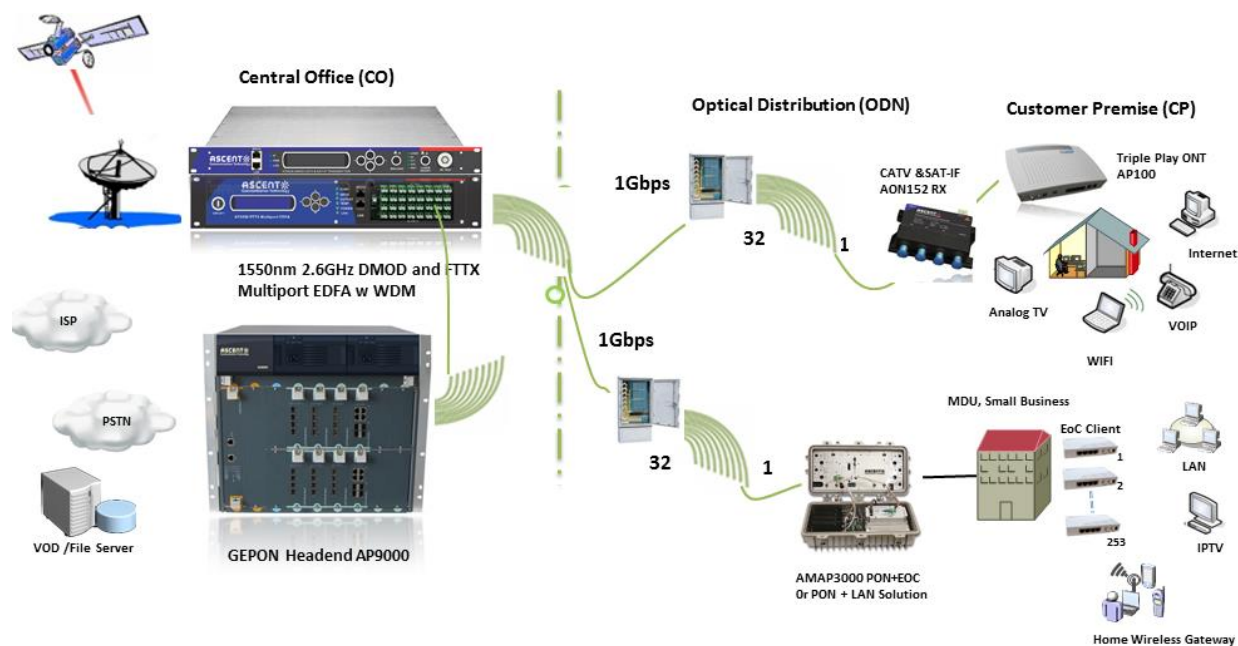
The AON120S optical receiver makes it possible for cable operators to protect their existing network investments and continue the deployment of FTTH networks for internet and VoIP delivery together with IPTV and Video On Demand systems.

The AON120S optical node is part of Ascent's overall FTTX solution suite, and it is designed with 1550 nm forward-path RF signals and optional WDM which allows for a video overlay over FTTH network topology and incorporates a low-noise optical receiver. An optional PON upgrade port combines these wide band 2.6 GHz CAVT and SAT-IF signals across a 1310/1490 nm EPON/GPON network, providing MSOs with a flexible platform to migrate from existing HFC systems to a PON FTTH network.

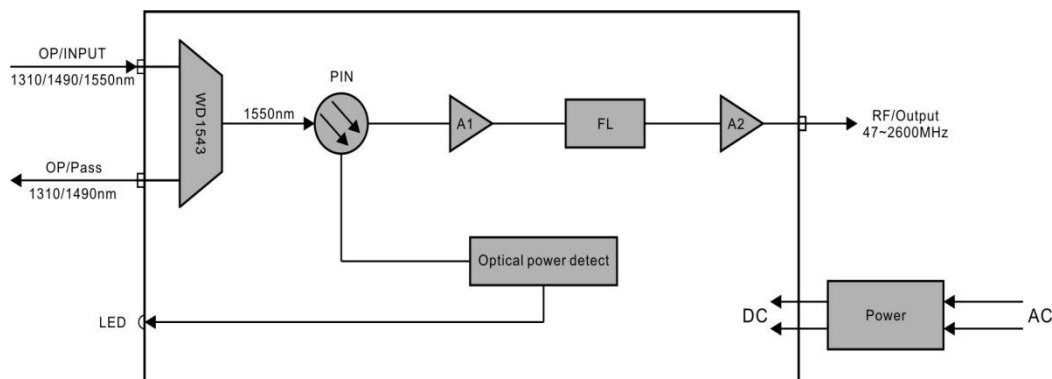
Key Features

- 2.6 GHz RF spectrum
- Wide band: 45 MHz to 862 MHz & 950 MHz to 2600 MHz
- High-performance and cost-effective CATV & SAT-IF ONU solution for FTTX networks
- Small form factor and low power consumption
- Optional integrated WDM to pass through PON signals to ONU in an FTTH network
- Powered directly using the power adaptor
- Compact and sturdy enclosure fits easily in wiring closets or network termination boxes

Application Diagram



Product Diagram



Specifications

AON120S CATV & SAT-IF Optical Network Unit

Parameter	Description
Downstream Receiver	
Wavelength	1310 nm / 1490 nm / 1550 nm
Optical Input Power	-9 dBm to 0 dBm
Optical Return Loss	≥45 dB
Optical Connector	LC/APC or SC/APC (specified by client)
RF	
Bandwidth	47 MHz to 862 MHz
Single Channel Output Level	77 dBμV to 83 dBμV (AGC controlled)
Flatness	±0.75 dB
Output Impedance	75 Ω
Return Loss	>16 dB
Output Level	75 dBμV to 95 dBμV
Link Performance	
CNR	≥51.0 dB
CTB	≥65.0 dB
CSO	≥65.0 dB
SAT-IF	
Frequency Range	950 MHz to 2600 MHz
Total Output Level	-50 dBm to -30 dBm
Flatness	±1.5 dB
IMD	-40 dBc (Total Output Power ≤ -20 dBm)
Input Impedance	>12 dB
Return Loss	2

General Characteristics

Power Supply	12 V DC
Power Consumption	≤4 W
Operating Temperature	0 to +50 °C
Storage Temperature	-20 °C to +85 °C
Relative Humidity	20 % to 85% RH (non-condensing)
Dimensions (L × W × H)	105 mm × 100 mm × 27 mm
Weight	0.3 kg

Ordering Information

Model	Description
AON120S	Placeholder

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Ver. ACT_AON120S_Datasheet_V1a_Feb_2016