

# Cabinet 2-port Deep Fibre Optical Node Solution

## **AON2100 Series**

- Compact Cabinet Housing
- Deep Fibre Node with 2 HighOutputs
- Suitable for MDU, SMB
- GaAs Technology
- Excellent Linearity
- Built-in Forward RedundancySwitch
- Optional ReturnTransmitter(FP or DFB)
- Fiber Management Tray
- 10 Amp Power Passing



AON2100 Series 2 port Node is part of ACT Deep Fiber solution, which helps operators expanding bandwidth of their existing HFC network while minimizing capital investment. The AON2100 Cabinet optical node is designed with two high outputs up to 112dBuV per port. Automatic Power Control (APC) maintains output level within a wide input range from -8 to +3dBm input.

The AON2100 Node is specifically catered for small network segmentation. The 2 port node is capable of accommodating 2 forward receivers for redundancy and 1 return transmitter, 1310, 1550nm, CWDM wavelength of choice, or 1 forward receiver and 2 return transmitters, which provides MSOs with an economical, flexible node for advanced HFC Video, FTTx, high density MDU, or SMB, University applications.

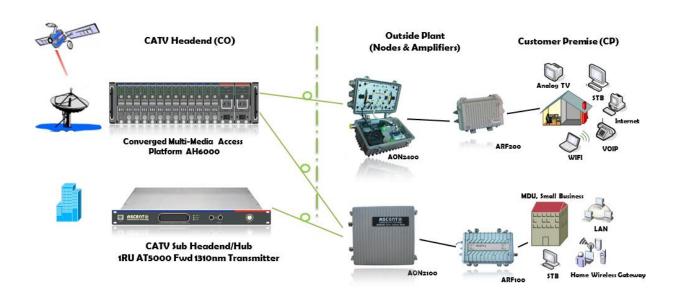
With the compact housing, modular design, AON2100 node provides the great flexibility for MSOs to deliver advanced video, high speed data, and voices services to their customers. This fiber deep product series improve overall network performance, and offers sufficient bandwidth for new applications.



## **Key Features** -

- 870MHz/1002MHz RF Spectrum
- Compact housing and low power consumption
- 1 or 2 High output power (112dBuV) to eliminate last amplifier
- 2 forward receiver modules for redundancy and 1 return path transmitter
- 1 forward receiver and 2 return path segmentable transmitters
- High performance and cost effective deep fibre solution for FTTX, MDU, SMB applications
- FP or DFB return path transmitter suits set-top box systems where pay-per-view and other various return path information sent via RF
- Local test points and LED indicators on optical receivers, return transmitters
- Built-in fiber management tray to simplify installation and maintenance
- JXP pads for attenuation and equalization
- 10 Amperes continuous power passing
- Optional HMS transponders to support EMS management

## **Application Diagram** •





## Specifications -

## AON2100 Deep Fibre 2 Port Optical Node

## **Downstream Specifications (Receiver)**

Optical Wavelength 1290 nm to 1600nm

Optical Input Power -8 dBm to +3 dBm (APC)

RF Bandwidth 54 MHz to 870/1002 MHz

Reference Output Level 2 × 112 dBmV, 60 ch PAL, 8 dB Slope, 3 % OMI

RF Flatness ±0.75 dB

RF Return Loss ≥16 dB up to 550 MHz, ≥14 dB up to 1000 MHz

RF Input Impedance  $75 \Omega$ RF Test Point -20 dB

**Link Performance** 

CNR 50 dB (60 ch PAL + QAM, -1 dBm receive)

CTB -65 dBc CSO -63 dBc

## **Upstream Specifications (Optional Transmitter)**

Optical Wavelength 1310, 1550, CWDM

RF Bandwidth 5 MHz to 42 MHz, 5 MHz to 65 MHz

Output Power 3dBm ( RF input > threshold )

RF Input Level Threshold ≥15 dBmV
RF Flatness ±0.75 dB
RF Return Loss 16 dB
Optical Return Loss 45 dB

**General Specifications** 

Optical Inputs 2 auto-switching

Optical Outputs 1
Optical Connector SC/APC
RF Outputs 2 F Female
Operating Temperature -40 °C to +65 °C
Storage Temperature -40 °C to +85 °C

Power Supply 35 to 90 VAC (remote) or 135 to 270VAC

Operating Relative Humidity 5 % to 95 % RH (non-condensing)

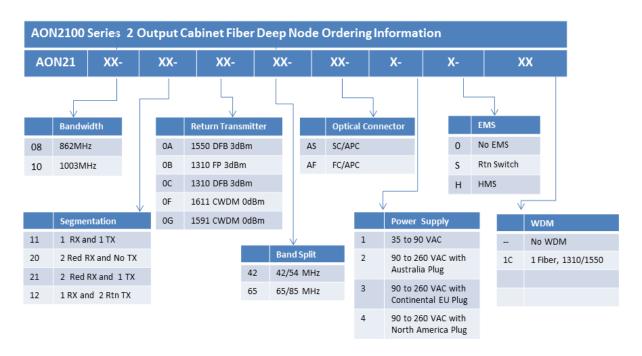
Power Consumption 50 W max with fully loaded module

Dimensions (W × D × H) 260 mm × 220 mm × 120 mm

Weight 1.0 kg Ship Weight 1.5 kg



## **Ordering Information**



## **Contact Information**

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