

## DATA SHEET

**GPON NETWORK** 

**FTTH Mini Node** 

# FTTH Mini Node Deep Fiber Solution

**IPCOR-ON120 Series** 



#### **FEATURES**

- Video Overlay for FTTH/PON network
- 1002MHz RF Spectrum
- RF Output up to 82dBuV
- Compact Housing
- Suitable for Home or MDU
- Optional PON Pass- Through Port
- Low Noise Circuit
- Low Power Consumption
- Single Fiber WDM option
- LED Status Indicators

#### Overview

IPCOR-ON120 Series FTTH mini node supports Video Overlay application over FTTH optical fiber access network. It operates on 1002MHz RF bandwidth, with high output power up to 82dBuV (AGC). IPCOR-ON120 has low power consumption and optional built-in WDM to support PON signal pass-through. It is part of ACT Deep Fiber and FTTH solution, which helps operators provide superior video services in FTTH PON network architecture.

The IPCOR-ON120 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 IPCOR-ON120 mini node is designed with built in WDM optical passive, which will pass the 1310/1490nm data wavelength to the ONU/ONT CPE device.

With the extremely compact housing, modular design, IPCOR-ON120 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.



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#### **Regional Representation**

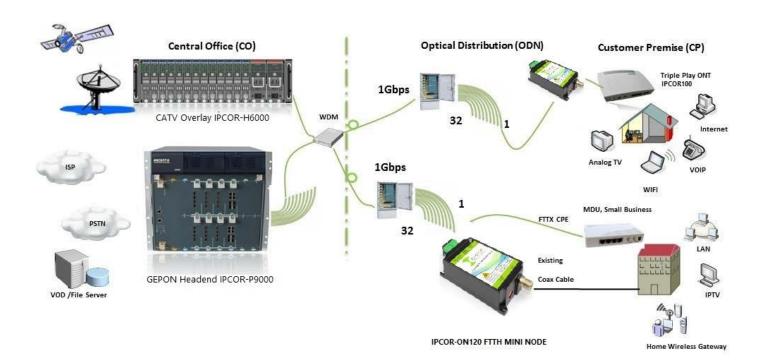
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#### **Key Features**

- 1002MHz RF Spectrum for superior video services
- Small form factor and low power consumption
- Low noise circuit (3.8% modulate, -10dBm receive, CNR ≥ 45dB)
- High output power up to 82dBuV for MDU application
- Excellent linearity at wider optical receiving range +3dBm to -12dBm
- Flatness less than ± 0.75dB In the range of 47~862MHz
- Metal shell, supply safeguards to opto-electrical sensing device
- Optional built-in WDM provides PON pass-through capability in a FTTH optical passive network
- Powered directly using the power adaptor
- The compact enclosure fits easily in CPE, ONU housing or network termination boxes

#### **Application Diagram**







#### **Specifications**

#### IPCOR-ON120 FTTH Deep Fiber Mini Node

Downstream	Wavelength	1200~1600nm or 1540~1560nm
<b>Specifications (Receiver)</b>	Optical Input Power	-12 to +3dBm (AGC: -10~+2dBm)
	Optical Return Loss	-55dB
	WDM IL (optional)	<=1dB
	Channel Isolation	>=40dB
	Responsivity	>=0.9A/W @ 1550nm
	Channel Isolation	>=40dB
	RF bandwidth:	47~ 1002 MHz
	Output Level	92dBuV @ +3dBm, 82dBuV @ -2dBm, Adjustable (MGC) 82dBuV @ -
	Output Level Adjustment	0~20dB
	RF flatness	+/-0.75 dB
	RF return loss	>=14 dB
	RF input impedance	75 Ω ?
	RF Connector	F-Female
Link Performance	CNR	48.0dB (60 PAL-D, -8dBm receive,
Link Performance	CNR CTB	48.0dB (60 PAL-D, -8dBm receive, -65dBc
Link Performance		
Link Performance	СТВ	-65dBc
Link Performance  General Specifications	CTB CSO HUM	-65dBc -65dBc -60dB
	CTB CSO	-65dBc
	CTB CSO HUM Optical Connector	-65dBc -65dBc -60dB SC/APC, SC/UPC, LC/PC
	CTB CSO HUM  Optical Connector Operating Temp, °C	-65dBc -65dBc -60dB SC/APC, SC/UPC, LC/PC -20 to 50
	CTB CSO HUM  Optical Connector Operating Temp, °C Storage Temp, °C	-65dBc -65dBc -60dB SC/APC, SC/UPC, LC/PC -20 to 50 -40 to 85
	CTB CSO HUM  Optical Connector Operating Temp, °C Storage Temp, °C Power Supply	-65dBc -65dBc -60dB  SC/APC, SC/UPC, LC/PC -20 to 50 -40 to 85 +12VDC
	CTB CSO HUM  Optical Connector Operating Temp, °C Storage Temp, °C Power Supply Operating relative humidity, %	-65dBc -65dBc -60dB  SC/APC, SC/UPC, LC/PC -20 to 50 -40 to 85 +12VDC 5 to 95
	CTB CSO HUM  Optical Connector Operating Temp, °C Storage Temp, °C Power Supply Operating relative humidity, % Power Consumption W	-65dBc -65dBc -60dB  SC/APC, SC/UPC, LC/PC -20 to 50 -40 to 85 +12VDC 5 to 95 <=3
	CTB CSO HUM  Optical Connector Operating Temp, °C Storage Temp, °C Power Supply Operating relative humidity, % Power Consumption W Dimensions (W x D x H)	-65dBc -65dBc -60dB  SC/APC, SC/UPC, LC/PC -20 to 50 -40 to 85 +12VDC 5 to 95 <=3 48×88×22 mm





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#### **Ordering Information**

IPCOR-ON1200 Series	Description
IPCOR-ON120-A-W-AG-LC-01	IPCOR-ON120 FTTH Mini Node 1002MHz, AGC 82dBuV, WDM PON Port, LC/PC, +12V Power Adaptor with AU Plug

Please contact your local sales representative for Product Availability in your area.

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Due to ongoing product development, technical specifications are subject to change without notice.