



# DATA SHEET

ACTIVE OPTICS

## Indoor CATV FTTH Receiver RF Overlay Optical Mini Node

### Introduction

The C-COR range of CATV FTTH Indoor Receivers are designed for receiving 1550nm RF Overlay optical signals. These Mini Nodes are available in either a Metal Case or a Plastic case and with or without GPON WDM. These Mini Nodes operate at temperatures up to 70°C and the Plastic Case model can support up to two RF outputs.

### Optical Specifications

Parameter	Metal Case	Plastic Case
CATV Wavelength (nm)	1550 ±10	
PON Wavelength (nm)	1310 / 1490	
Optical Input Range (dBm)	-20 ~ +2	-18 ~ 0
AGC Control Range (dB)	-10 ~ 0	-12 ~ -2
Optical Return Loss (dB)	≥45	
WDM Insertion Loss (dB)	≤ 1.0	
Optical Input Connector	SC/APC	
Optical PON Connector	SC/APC or SC/UPC	

### Link Parameters

Parameter	Specification
Link Performance CNR (dB)	≥ 48 @ -8dBm
Link Performance CSO (dB)	≥ 65 @ -8dBm
Link Performance CTB (dB)	≥ 65 @ -8dBm

### Features

- Metal Case or Plastic Case
- With or Without GPON WDM
- Plastic Case supports up to 2 RF outputs
- Max. Operating Temperature:
  - Plastic Case: 65°C
  - Metal Case: 70°C



# DATA SHEET

ACTIVE OPTICS

## Australia Office

4 / 195 Chesterville Road  
Moorabbin VIC 3189  
Australia

T. +61 3 9241 0600  
E. sales@c-cor.com.au  
www.c-cor.com.au

## RF Specifications

Parameter	Metal Case	Plastic Case
Bandwidth (MHz)	47~1000	
Flatness (db)	±1.5	±1.0
RF Output Level (dBuV)	≥ 83	≥ 76
Return Loss (dB)	≥ 14	
Impedence (Ω)	75	
MGC Control Range (dB)	0 ~ 20±2	n/a

## Physical Specifications

Parameter	Metal Case	Plastic Case
Dimensions (mm)	112 x 50 x 22	90 x 85 x 25
Weight (each) (kg)	0.25	0.15
Storage Temperature (°C)	-40 to +70	-25 to +70
Operating Temperature (°C)	-40 to +70	-25 to +65
Operating Humidity	90% (non-condensing)	
Input Voltage	12Vdc @ 0.5A	
Power Consumption (W)	≤ 3	≤ 1

## Ordering Information

C-COR Part Number	Description
A31.307177N	Mini Node with WDM, SC/APC IN, SC/APC PON, 12Vdc, Metal Case
A31.307197N	Mini Node with WDM, SC/APC IN, SC/UPC PON, 12Vdc, Metal Case
A31.307077N	Mini Node without WDM, SC/APC IN, 12Vdc, Metal Case
A31.4027197N	Mini Node with WDM, SC/APC IN, SC/UPC PON, 2 x F-Fem, 12Vdc, Plastic Case

© C-COR Broadband 2025  
Issued March 2025

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