The BC21R23 series FTTH optical receiver is compact in-door optical node especially designs for FTTH application. It designs with a single MMIC chip, compared with the two-stage amplifier structure, it has the characteristics of high integration, high performance, excellent anti-jamming performance. It provides high quality and high performance FTTH network solution for cable TV operators.

Main Features

- Low power consumption
- AGC optical constant level output
- Aluminum alloy shell
- Optical control AGC circuit built in
- External modular power

Specification

	Item	Parameter
Optical	Wavelength	1550 ± 10 nm
	PON Pass Wavelength	1310(1260~1360) nm / 1490(1480~1500) nm
	Optical return loss	≥45 dB
	Isolation	Pass band ≥35 dB λ = 1550 nm
		Reflect band ≥20 dB λ = 1310/1490 nm
	Insert loss	Pass band ≤0.8 dB λ = 1550 nm
		Reflect band ≤0.6 dB λ = 1310/1490 nm
	Optical input range	-18 ~ 2 dBm (Recommended Range: -9 ~ 0)
	AGC Range	-9 ~ 0 dBm
RF	Bandwidth	47 ~ 1002 MHz
	RF output level	≥80 dBuV@AGC(-9 ~ 0), RFsource = 80 dBuV
		≥76 dBuV@ -11dBm, RFsource = 80 dBuV
		≥70 dBuV@ -15dBm, RFsource = 80 dBuV
	Flatness	± 0.75 dB
	Impedance	75 Ω
	Output return loss	16 dB

	Item	Parameter
Analog TV Test channel 59 CH(PAL-D) 535.25MHz	OMI	3.8%
	CNR	59dB@-9dBm,RFsource >90dBuV
		>57dB@-11dBm,RFsource >90dBuV
		>51.7@-17dBm,RFsource >90dBuV
	CTB	≤-65 dB
	CSO	≤-65 dB
Digital TV	OMI	4.3%
	MER	>39.2dB@-9dBm, RFsource = 80dBuV
		>36.2dB@-11dBm, RFsource = 80 dBuV
		>31dB@-15dBm, RFsource = 80 dBuV
	BER	<1.0E-9 @-17dBm,RFsource = 80dBuV
Environmental	Operating temperature	-25 ~ 85 ℃
	Storage temperature	-40 ~ 85 ℃
	Storage humidity	≤95%
	Power consume	<1 W
User Interface	Optical Connector Type	FC/APC or SC/APC
	Power interface	DC5V/0.5A
	RF Output Connector	1 or 2
	Optical Power Indicator Three color lights	Red: > 0 dBm
		Green: 0 ~ -11 dBm
		Orange: <-11 dBm
	Size	110 × 90 × 25 mm
	Weight	100 g