

The BC21R36 series FTTH optical receiver is specifically designed for CATV FTTH network. Adopting aluminum alloy shell, with optical control AGC circuit built in, compact structure and external modular power supply make the installation and debugging very convenient. It is an ideal product to build FTTH CATV network.



Main Features

- Single MMIC chip solution
- RF bandwidth : 45 ~ 1006 MHz
- Aluminum alloy shell
- Output level: > 80dBuV @AGC(-9 ~ 0 dBm) power input
- External modular power
- Wide optical power input range -18 ~ +2 dBm
- Digital AGC control and range -9 ~ 0 dBm
- MER: >39.2dB @-9dBm, RFsource $\geq$ 80dBuV
- CNR: >57dB @-11dBm, RFsource $\geq$ 90dBuV

Specification

	Item	Parameter
Optical	Wavelength	1550nm
	Pass Wavelength	1310/1490 nm
	Optical return loss	≥ 45 dB
	Isolation	Pass band ≥ 35 dB, $\lambda = 1550$ nm
		Pass band ≥ 20 dB, $\lambda = 1310$ nm $\lambda = 1490$ nm
	Insert loss	Pass band ≤ 0.8 dB, $\lambda = 1550$ nm
		Pass band ≤ 0.6 dB, $\lambda = 1310$ nm $\lambda = 1490$ nm
	Optical input range	-18 ~ 2 dBm (Recommended Range: -9 ~ 0 dBm)
RF	AGC Range	-9 ~ 0 dBm
	Bandwidth	45 ~ 1006 MHz
	Flatness	± 0.75 dB
	Output level	>80dBuV@AGC(-9 ~ 0), RFsource = 80 dBuV
		>76dBuV@ -11dBm, RFsource = 80 dBuV
		>70dBuV@ -15dBm, RFsource = 80 dBuV
	Output return loss	16dB

	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 °C
	Storage temperature	-40 ~ 85 °C
	Storage humidity	≤ 95%
	Power consume	<1 W
User Interface	Optical Connector Type	SC/APC or SC/UPC
	Power interface	DC5V/1A (External adapter)
	RF Output Connector	1 or 2
	Optical Power Indicator Three color lights	Red: > 0 dBm
		Green: 0 ~ -11 dBm
		Orange: <-11 dBm
	Size	100 × 67 × 23 mm
	Weight	190 g