FTTH Optical Receiver With WDM

Model: NCM-FTTH-WDM-OR

Description

The NCM-FTTH-OR is a highly linear optical to electrical converter for use in FTTH applications. I use a high gain, low distortion receiver PD and low noise RF circuit to deliver high RF level output at lower optical power, provide good CNR, CSO and CTB distortion specifications.

AGC: Automatic Gain Control (AGC) circuits is to provide a relatively constant output amplitude of CATV signals NCM-FTTH-OR has a built in AGC function to enable RF output tolerance in 2dB even when optical input power various from -8dBm to 0dBm.

Built-in WDM: The 1550 nm broadcast analog video signal can be delivered over P2MP GPON or GEPON network by using WDM technology. The built-in WDM optical receiver has the one optical input port and on PON output port. The optical input contains downstream forward path CATV signals at 1550nm, downstream Ethernet data at 1490nm and upstream Ethernet data at 1310nm. The optical output passes the 1310nm and 1490nm signals. The 1550nm wavelength goes to a photodiode and is amplified.



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Unless otherwise noted, the above specifications reflect typical device performance at stated reference levels in the recommended operating configuration(s). Specifications are subject to change without notice.

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Technical Data

Name	FTTH optical receiver
CATV Input Optical Wavelength	1550 nm
PON Optical Wavelength	1490nm/1310nm
Working Optical Power	-9dBm ~ +2dBm (Analog TV RF) -15dBm ~ +2dBm (DVB-C QAM RF)
Optical Connector	SC/APC, SC/PC
Optical Return Loss	≥50 dB
RF Bandwidth	50 ~ 1000 MHz
RF Connector	F-Type Female
RF Output Impedance	75Ω
RF Output Level	20dBmV@ -5dBm optical
RF Flatness	≤± 0.75dB
RF Return Loss	≥15 dB
Analog TV RF CNR	≥47dBc@ -5dBm optical & 59 channel PAL-D
CSO	≤-60 dBc @59 channel PAL-D
CTB	≤-60 dBc @59 channel PAL-D
Power Supply	12VDC/ 0.5A Power Adaptor
Power Consumption	＜2.7W
Working Temperature Range	0 ~ +50℃
Dimension (L*W*H)	108mmX101mmx26mm
Weight	0.1 Kg

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