

Światłowodowy odbiornik optyczny

FILTER RF-1R-83D-FTTH MINI



Description

The **RF-1R-83D** FTTH 1 Way output CATV AGC receiver with work bandwidth 45-1002MHz, AGC function, output level $V_o=80\text{dB}\mu\text{V}\pm 1\text{dB}$ ($\text{Pin}=-10\sim-3\text{dBm}$), applies to FTTH system and GPON/EPON applications, it is a low power consume, high performance ONU for RFTV broadcast network. **RF-1R-83D** adopt high sensitivity optical receiving tube and RFOG specialized low noise match circuit, 3.5% modulate full channel transmit power receiving and the CNR can reach high index 51dB*. **RF-1R-83D** has two types according to different functions. **RF-1R-83D** is standard type, **RF-1R-83DF** is build-in filter, RFTV operating in 1550nm. Customer could choose the suitable model according to their systems application.

RF Typical Performance

Parameter	Units	Min	Typical	Max	Supplement
Frequency	MHz	45		1002	
Flatness of Frequency Response	dB		± 1.0		
RF output stability in AGC range	dB		± 1		$\text{Pin}:-10\sim-3\text{dBm}$
Port	-		1		
RF port	-		F-female		
Output level	$\text{dB}\mu\text{V}$		80*		$\text{Pin}:-10\sim-3\text{dBm}$
Output Return loss	dB		≥ 14		
Output Impedance	Ω		75		
CNR	dB			$\geq 51^*$	
CSO	dB			$\geq 60^*$	
CTB	dB			$\geq 60^*$	

*Testing condition: input power @-4dBm, 42 CENELEC channels, OMI=4,5%

Optical Typical Performance

Parameter	Units	Min	Typical	Max	Supplement
Optical Input Wavelength	nm	1540	1550	1560	Filter Wavelength 1310 \pm 10 & 1490 \pm 10
Responsivity	A/W		≥ 0.9		
Optical Return loss	dB		≥ 40		
Input Level Range	dB	-12		-1	
Receiving power AGC Range	dBm	-10		-3	
Optical Power Indicator (LED)	-	OFF: Power OFF, RED: Power ON, PIN<-12dBm, Green: Power ON, PIN \geq -12dBm			
Optical connector	-	SC/APC			

General feature

Parameter	Units	Min	Typical	Max	Supplement
Power supply	V		9		
Power consumption	W		1,5		
Work temp	$^{\circ}\text{C}$	-20		+55	
Weight without Power Supply	kg		0,1		
Dimension	cm		6*3*2		WxDxH

Key Features

- Optical CATV home receiver
- Ultra low noise technology
- Very low distortion
- Wide range of optical input power
- Single-mode fiber high return loss
- F-female 75 ohm RF output

Main application

- CATV HFC networks
- FTTH FTTP networks
- xPON system