

OP-RX2600 - CATV & SAT-TV Optical Receiver

1. Product Summary

OP-RX2600 is the specialty product that specially developed for the CATV and satellite direct TV transmission in one network. With small shell, compact and reasonable internal circuit structure and excellent performance, is compatible with FTTxPON technology. Realize FTTH and the integration of Analog TV, Digital TV (DBS-C, DBS-T) and Satellite TV.



2. Performance Characteristics

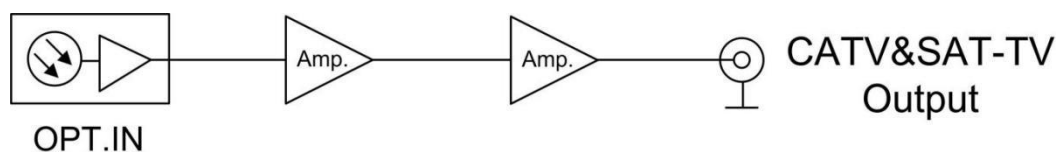
- High linearity, suitable for Analog TV&SAT-IF application.
- Bandwidth: 45~2600MHZ.
- Simultaneously receive CATV and SAT-IF signal, can be compatible with FTTxPON technology.
- Analog TV, Digital TV and Satellite TV have excellent performance:
- Analog TV: (84CH PAL-D, OMI=3.8%, Pin=-1dBm) C/N>51dB, CTB≤ -66dB, CSO≤ -62dB;
- Digital TV: (Original signal MER=38.6dB, BER<1.0E-9) Pin=-14dBm, MER≥33dB (MER degrade 5dB), Pin=-19dBm, BER<1.0E-9;
- Satellite TV: (Original signal quality =64%) Pin=-20dBm, signal quality >38%.

3. Technique Parameter

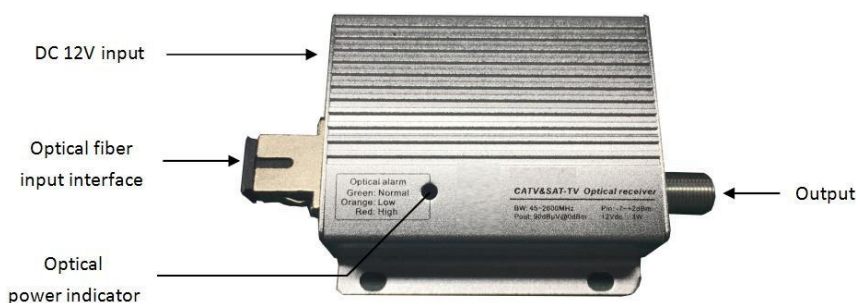
Item		Indexes			Remark
		Min	Typ	Max	
Optical Characteristics					
Operating Wavelength	nm	1260		1620	
Responsivity	A/W	0.85			
Receiving optical power range	dBm	-7		+2	Analog TV
		-14		+2	Digital TV
		-20		+2	Satellite TV
Optical Return Loss	dB	50			
Optical Connector Type		SC/APC			
RF Characteristics					
Operating Bandwidth	MHz	45		2600	
Output Level	dBμV		90		@Pin=0dBm
Flatness	dB	-1.0		+1.0	45~862MHz
		-2.5		+2.5	950~2600MHz
Output Return Loss	dB	14			45~862MHz
		12			950~2600MHz
C/N	dB	51			@Pin= -1dBm,
CTB	dB	66			Pout>88dBμV,

CSO	dB	62			84CH PAL-D, OMI=3.8%
HUM	dB	-60			
Output Impedance	Ω		75		
RF connector		F type(Male/female selectable)			75 Ω
General Characteristics					
Operating Voltage (DC)	V		12		
Consumption	W		≤ 3		
Operating Temperature	$^{\circ}\text{C}$	-20		+60	
Storage Temperature	$^{\circ}\text{C}$	-40		+85	
Dimension (W) \times (D) \times (H)	mm	105 \times 67 \times 24			

4. Block Diagram



5. Structure Description



Input optical power indicator description	
LED color	Description
Green	Normal
Orange	Low input optical power (<-20dBm)
Red	High input optical power (>+2dBm)

6. Application link

