



OP-1Rx
Optical Receiver
45 ~ 2600MHz



User Manual

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1.0 Product Summary

This product is specially developed for the CATV and satellite direct TV transmission.

With a small footprint, compact and internal circuit structure provides excellent performance, and is compatible with FTTxPON technology.

FTTH and the integration of Analog TV, Digital TV (DBS-C, DBS-T) and Satellite TV.

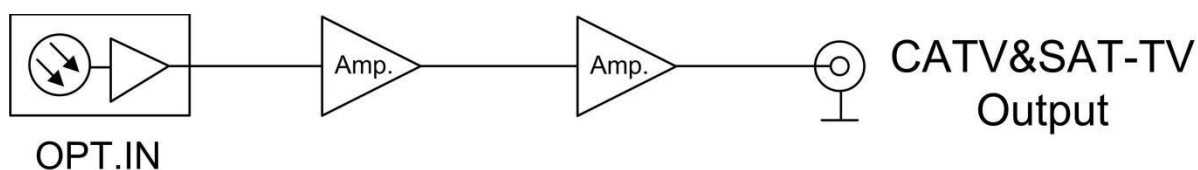
2.0 Performance Characteristics

- 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%.

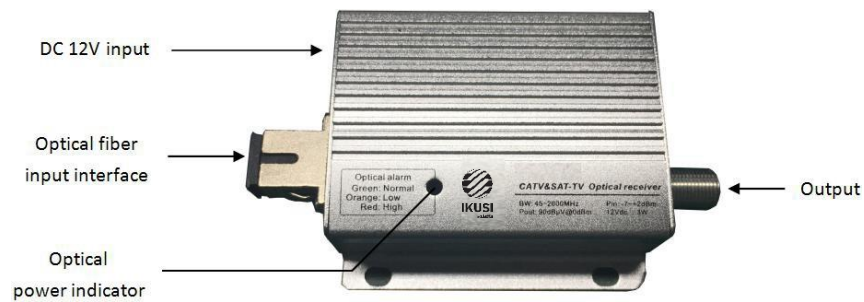
3.0 Technical Parameters

Item		Indexes			Remark
		Min	Type	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)			75Ω
General Characteristics					
Operating Voltage (DC)	V		12		
Consumption	W		≤3		
Operating Temperature	℃	-20		+60	
Storage Temperature	℃	-40		+85	
Dimension (W)×(D)×(H)	mm	105×67×24			

4.0 Block Diagram

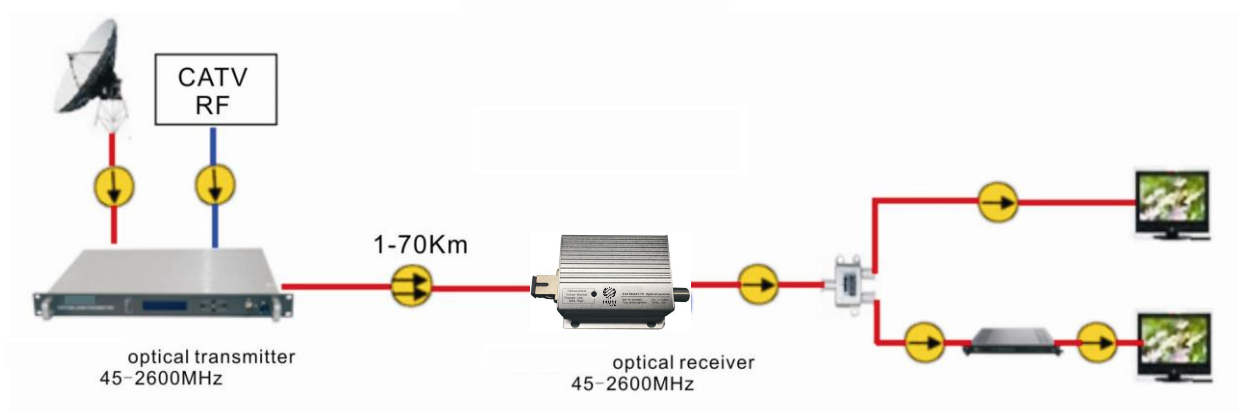


5.0 Structure Description



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

6.0 Application link



7.0 Guarantee and repair items

Please note:

1. Goods presented for repair may be replaced by refurbished goods of the same type rather than being repaired. Refurbished parts may be used to repair the goods.
2. During the process of repair, some or all of your stored data may be lost. Please ensure that you have saved this data elsewhere prior to repair.

Contact Ikusi for any return material authorization (RMA) via sales@ikusi.com.au or 61 3 97208000

A pre-authorized copy of RMA form must accompany all return shipments. All return goods must be reasonably prepared for shipment, including packaging and proper boxing for small components and/or banding for pallets, to protect them during transit. Received Damaged Goods caused by improper packaging will not be credited. ALL Goods must be returned in its Original Packaging and must be in Good Saleable Condition. Goods not meeting this condition will be rejected for credit.