Product Description:

SRB series optical receiver is a practical indoor type optical receiver designed to meet the network fiber renovation project. This product has 1 to 2 RF output ports. And set the optical AGC function when +2dBm ~ -6dBm when receiving the output can be maintained at 106dBμV above (dual); shell using cast aluminum shell.

Functional Features：

✧ 45MHz to 1000MHz platform broadband and 1310, 1550 dual window design platform;

✧ Perfect surge suppression circuit with high-pass filter, with strong resistance to lightning strikes and prevention of surge impact;

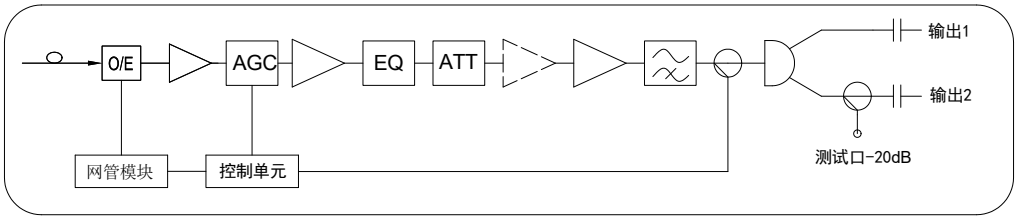
✧ low power consumption design, the whole power consumption is less than 15W; and has a digital display and online operation function.

✧ Type II transponders can be used；

Product Overview：

Serial No.	Name	Functional Description
1	RF Output1	RF output port 1
2	RF Output2	RF output port 2
3	RF Test site	-20dB RF test port
4	Power Interface	External power adapter DC output DC12V 1A
5	Fiber optic interface	FC/APC or SC/APC
6	Operation key	SELSelect Project SETparameter setting
7	Indicator light Digital Display Status light	RF is the output power EQ is the equalization value ATT is the attenuation value OP is the received optical power
8	Digital Display	RF: display the current total power, unit dBuV too high HI too low LO (factory default 50 sets of programs) EQ: display the equalization value, unit dB, adjustable range 0-15 ATT: display attenuation value, unit dB, adjustable range 0-15 OP: display the received optical power value, unit dBm too high display HI, too low -9 display LO
9	Status light	Power: Power indicator, normal for red Optical: Receive optical power indicator, green (+3 to -9) red for the alarm Level: RF output status indicator, normal green, output is too low or too high display for red

SRB-200 Optical Receiver Electrical Block Diagram



SRB-200 Optical Receiver Specifications

Serial No.	Item	Technical parameters	Remarks
1	Received wavelength	1290-1600nm	
2	Input optical reflection loss	>45dB	
3	Current responsiveness	0.85A/W(1310nm representative value)	
4	Range of received optical power	+3dBm～-9dBm	

5	output level	106dB μV±1dB	+2dBm- -6dBm receive
6	Fiber Type	single mode(9/125nm)	
7	Fiber Optic Connector Type	FC/APC or SC/APC	
8	Equivalent noise input current	≦8PA √Hz	SJ/T10663-1995 NO.4.21
9	Frequency bandwidths	87-1002MHz	
10	RF in-band flatness	±1dB	
11	RF reflection loss	≥16dB (45-1000MHz)	
12	System link metrics	C/N ≥46dB	note
		C/CTB ≥ 62dB	
		C/CSO ≥ 62dB	
13	Test Port Level	-20dB	Relative to main output
14	Gain Adjustment Ranges	0~20dB(1 dB progress)	(of products) leave the factory 0dB
15	Range of tilt adjustments	0~14dB(1 dB progress)	(of products) leave the factory 0dB
16	RF output connection	F-connector	
17	Power supply voltage for AC	DC+12A/1A	
18	maximum power dissipation	≤10W	

Note: Under the specified link loss conditions, configure 59 PAL-D analog TV channel signals within the 550MHz frequency range, and transmit digital modulation signals within the 550 MHz to 862MHz frequency range. The level of the digital modulation signal (within an 8 MHz bandwidth) is 10dB lower than the carrier level of the analog signal. When the optical receiver input optical power is-6 dBm, measure C/CTB, C/CSO, and C/N. The nominal RF output level is at the 862 MHz frequency point, with the actual output being 10dB lower.

Instructions for Use:

1、**Electricity Supply:** Before using the external power adapter to supply power to the equipment, confirm that the housing is well grounded before connecting the power supply; after the power is connected, the alarm status light and power indicator light in the machine are lit to indicate that the power is normal.

2、**2、Input fibre optic connection：** Disconnect the power supply and use lens paper dipped in anhydrous alcohol to connect the input optical fiber to the optical fiber

adapter (FC/APC or SC/APC). When winding the fiber, ensure it is not too bent. Under the condition that the input optical power does not exceed 2mW (3 dBm), reconnect the power supply; the power indicator light should illuminate. The digital display should show the current optical power. If the received optical power is lower than or below the displayed LO or if the "Optical" red light is on, you can perform a power measurement test. Under normal circumstances, this value should be consistent with the actual measurement from an optical power meter. Otherwise, wipe the fiber optic connector.

3、Output level adjustment： This machine in +3dBm to -6dBm optical power input, the standard configuration of the whole machine output level of 106dBV. correct input optical signal, in the output port of the field intensity meter to detect the level of value, can be adjusted by adjusting the attenuation position on the size of the attenuator fixed attenuator attenuation amount to adjust the size of the whole machine's output level; appropriate setting of the tilt of the output level can improve the distortion characteristics of the RF transmission, the machine in the The slope of the output level is set to 0dB when it is shipped from the factory, as long as you adjust the fixed attenuation value on the position of ‘tilt’, you can set the slope of the level of the whole machine to a specific value (the slope is adjusted by means of a fixed attenuator to achieve this); this machine can also be used according to the actual needs of different networks. In the process of using, you can use the -20dB test port corresponding to the output port to carry out online measurement and maintenance without interrupting the downstream output.