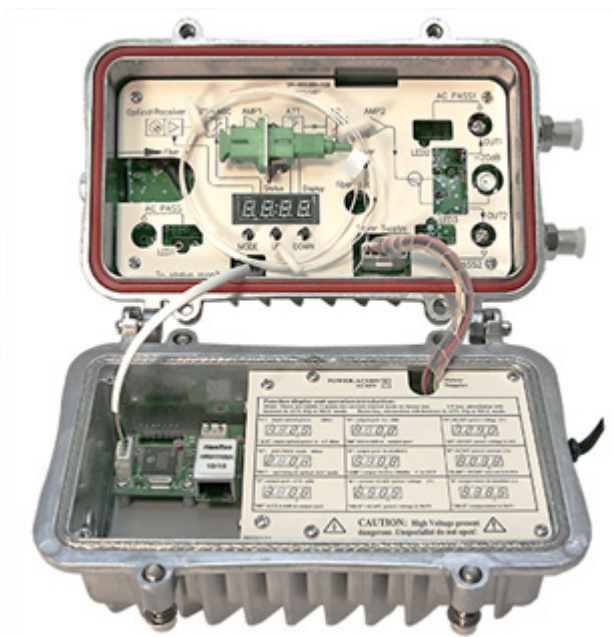


OR-862 / OR-862S

Series optical receiver

Operation Manual



1. Overview

OR-862 / OR-862S field optical receiver is a kind of new CATV network product. It adopts GaAs MMIC amplifying component reasonably combined with GaAs amplifying module. AGC/MGC function is optional, which makes output level keep stable when input optical power is -6~+1dBm, and also makes the machine has higher performance index. It is also possible to realize output level and slope's control through network management system to machine, and makes it has higher performance index, as well as making CATV network project very convenient to debug. Meanwhile can transmit digital and analogue signal. This is FTTH main-stream machine type in current HFC network system construction.

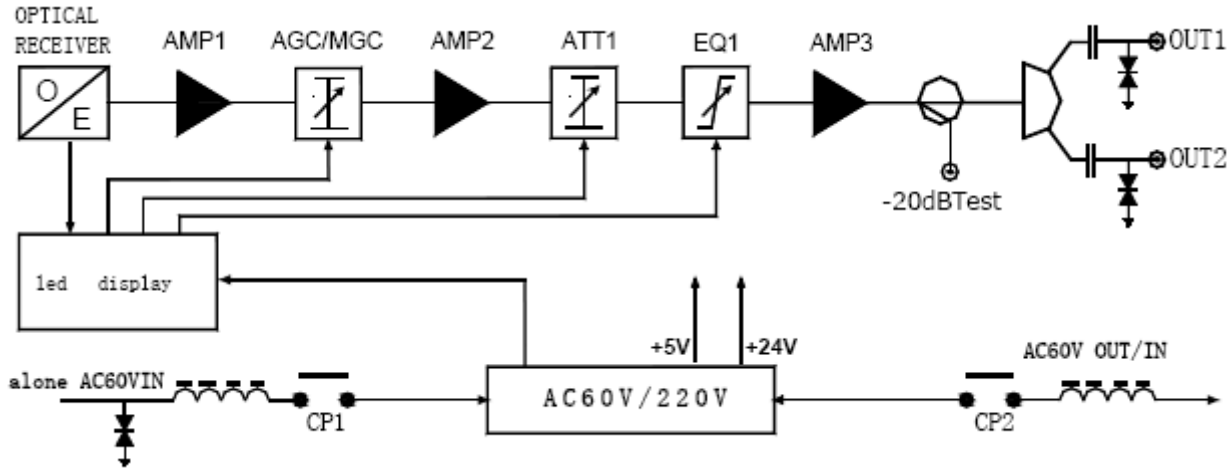
2. Features

- 1310nm and 1550nm dual-window receiving;
- LED numeral pipe displays each operation parameter real-timely (optical power, attenuation, equalization, output level, voltage, current).
- Key can be optional and adjusts RF output level and slope;
- Output is plug-in 1-way tap or 2-way splitter, easy to replace and use.
- AGC/MGC function, it makes output level stable when input optical power is -6 ~ +1 dBm;
- High-reliable switching power supply, small temperature rise, high converting efficiency and wide voltage range.
- Each port is equipped AC60V supply power LED indicator light, easy to use.
- Perfect surge suppression circuitry, which is efficient to prevent surge stroke and lightning.
- Equipped AC60V sole power port, easy to use.
- Built-in network management responder complying with SNMP protocol, the user can manage the equipment through network management system (only for OR-862S).
- High-quality die-casting housing which is characterized by dust-proof, water-proof, good shield and good performance of heat-dissipating, easy to install.

3. Performance specifications

Items	Units	Parameters	
		OR-862	OR-862S
Model	-	OR-862	OR-862S
RF output ports	-	2	
Receiving optical wavelength	nm	1290~1600	
Optical connector type	-	SC/APC	
Input optical power range	dBm	-8~+2	
Optical control AGC input range	dBm	-6~+1	
Recommending input optical power range	dBm	-6~0	
Optical return loss	dB	≥50	
In-band flatness	dB	≤±0.75	
Frequency range	MHz	47~862	
RF output level	dBμV	≥114dBuV (1-way tap)	
RF output impedance	Ω	75	
Attenuator and equalizer adjusted type	-	Key adjusting numeral control attenuation	
Attenuation adjusting range	dB	0~14	
Equalization adjusting range	dB	0~14	
Output return loss	dB	≥16	
Optical link C/N	dB	≥51 (-1dBm receiving, 59 ch PAL-D)	
Optical link C/CTB	dB	≥65 (-1dBm receiving, 59 ch PAL-D)	
Optical link C/CSO	dB	≥60 (-1dBm receiving, 59 ch PAL-D)	
Network management type	-	-	II sort network management
Network management interface	-	-	RJ45
Power voltage	V	AC35~90 or AC110~265	
Power consumption	W	16.0 (max)	
Operating temperature	°C	-40~+55	
Dimension	mm	230×135×98	
Net weight	Kg	1.2	

4. Block diagram



5. Operation introduction

5.1 power supply: Fix the equipment well and check whether power voltage is in the stipulated range before put through power supply. For the optical receiver whose voltage is AC220V, input AC voltage should be in the range of 110~265V; for AC60 power optical receiver input AC voltage should be 35~90V.

AC60 power optical receiver OR-862/OR-862S can be powered through any one of AV60V sole power port AC60V IN, OUT1, OUT2. Each of them has an on-off switch controlling power and power indicator light. Plug in its on-off switch, get through its power or output power, and power indicator is on. Pull out and power is of, and power indicator is off. We should choose this port's on-off switch according to requirement in operation. Please make the redundant power port's on-off switch be off to avoid damage other equipment. ***It's forbidden to supply power to this equipment through two or more than two ports at the same time!***

5.2 Connect fiber: Make the water-proof pigtail lead into optical receiver from the left hole of optical receiver bottom shell and fix the redundant fiber in the fiber rack. Clean input fiber connector well by using absorbent cotton with absolute alcohol and measure input optical power by Optical Power Meter to measure input optical power. In the situation of input optical power satisfying the designed request, connect fiber connector and the flange of optical receiver, **then according four-digit high-bright LED display mode "1" to inspect input optical power value, therein, to display "Lo" means input optical power $\leq -8\text{dBm}$; to display "Hi" means input optical power $\geq +2\text{dBm}$.** Besides, receiving range of recommended optical power is -6~0dBm.

5.3 Adjust output level: When input optical power complies to the designed request, use Signal Level Meter or Frequency Spectrum Meter to measure output level of output port. If output level is over-high, this equipment can make output level complies with designed value though adjusting attenuation in Mode "3". In order to ensure optical receiver's CTB and CSO index, we suggest output level has a certain slope, make output level complies with designed value though adjusting slope value in Mode "4".

The slope is as the following table shown:

Output level (dB μ V)	102	104	106	108	110
Slope (dB)	6	8	10	12	14

6. Packing list

An optical receiver, an operation manual and a 1-way tap (2-way splitter defaulted).

7. After-sales service

1. If you encounter any technical or merchandise problems in operating, please contact with our company.
2. The maintenance will be free within 12 months (except the damage is artificial or caused by irresistible force).