Codificación: WT-GJS862F	**INFORMACION TECNICA**	
Fecha: 2013		
Hojas 1de4		
Asunto	**Receptor Óptico de 860 Mhz. 2 Salidas Rack**	

Ⅰ. Summary

- OPR-8602R、OPR-7502R series room 2-way output optical receiver is used for long-distance optical fiber transmission of TV image signal, digital TV signal telephone sound signal and data (or compressed data) signal.
- Our company develops the first CATV optical receiver since 1995, we have studied the various technical performance of CATV optical receiver for more than 10 years, which has accumulated a lot of experience in product development and engineering practice, improve the internal circuit, external structure and performance index.
- At present, our company has acquired the most advanced CATV optical receiver design skills and production technology in domestic industry; at the same time, the yield of our CATV optical receiver is first in this area.

Ⅱ. Performance Characteristic

- Forward optical receive part adopts PHILIPS, PHOTON and E-O PIN Optical Receiving IC, import PHILIPS or MOTOROLA low-noisy push-pull amplify module in pre-RF amplify circuit, import PHILIPS or MOTOROLA power double amplify module (or depends on customers, adopt GaAs).
- Return optical receive part adopts high-performance FP or DFB laser as optical source, adopts PHILIPS or MOTOROLA low-noise amplifier

module as RF amplifier, ensure NPR.

- Insert Dual-Filter, insert Fix-Equalizer, Fix-Attenuator insert output splitter, eighth-order optical power indication, reasonable testing connector, make more convenient
- Aluminum waterproof housing, high-capability power switch, anti-thunder system, make sure work properly outdoor.

Ⅲ. Performance Parameter

Item	Unit	Parameter		
		OPR7502RP（OPR8602RP）	OPR7502RO（OPR8602RO）	OPR7502RE（OPR8602RE）
Forward Performance Parameter				
Optical Parameter				
Receive Optical Power	dBm	-5 ~ +2		
Propose Use Range	dBm	-3 ~ +1		
Return Loss	dB	> 45		
Optical Wavelength	Nm	1100 ~ 1600		
Connector Type		FC/APC、SC/APC		
Fiber Type		Single Mode		
Circuit Performance				
（C/N）	dB	≥ 51		
（C/CTB）	dB	≥ 65		
（C/CSO）	dB	≥ 60		
RF Parameter				
Frequency Range	MHz	45/87 ~ 750/862		
Flatness in Band	dB	±0.5(45 ~ 550 MHz); ±0.75（550 ~ 750/862 MHz）		
ated Output Level	dBμV	≥ 96		
Max Output Level	dBμV	≥ 104		
Output Return Loss	dB	≥ 16(45~550 MHz); ≥ 14（550~750/862 MHz）		
Output Impendence	Ω	75		

Item	Unit	Parameter		
		OPR7502RP（OPR8602RP）	OPR7502RO（OPR8602RO）	OPR7502RE（OPR8602RE）
Return Transmit Performance Parameter				
Optical Parameter				
Optical Transmit Wavelength	nm	1310±10		
Laser Type		FP or DFB Laser		
Output Optical Power	mW	1 ~ 3		
Connector Type		FC/APC、SC/APC		
RF Parameter				
Frequency Range	MHz	5~30/65（or specified by customer）		
Flatness in Band	dB	±1.5		
Input Level	dBμV	90 ~ 98		
Input Return Loss	dB	≥ 16		
Output Impendence	Ω	75		
NPR	dB	≥10（NPR≥30 dB）		
General Performance				
Supply Voltage	V	A：AC 135~250；B：AC 35~90(50Hz)		
Operating Temperature	℃	-40 ~ 60		
Storage Temperature	℃	-40 ~ 65		
Relative Humidity	%	Max 95% No Condensation		
Consumption	W	≤ 40		

Dimension	mm	483(L)×240(W)×44(H)

★ Special Notice

The performance parameters of this manual according to GY/T143-2000《Network Entry Technical Requirements and Measurements Method of CATV laser Optical Transmitter and Receiver》

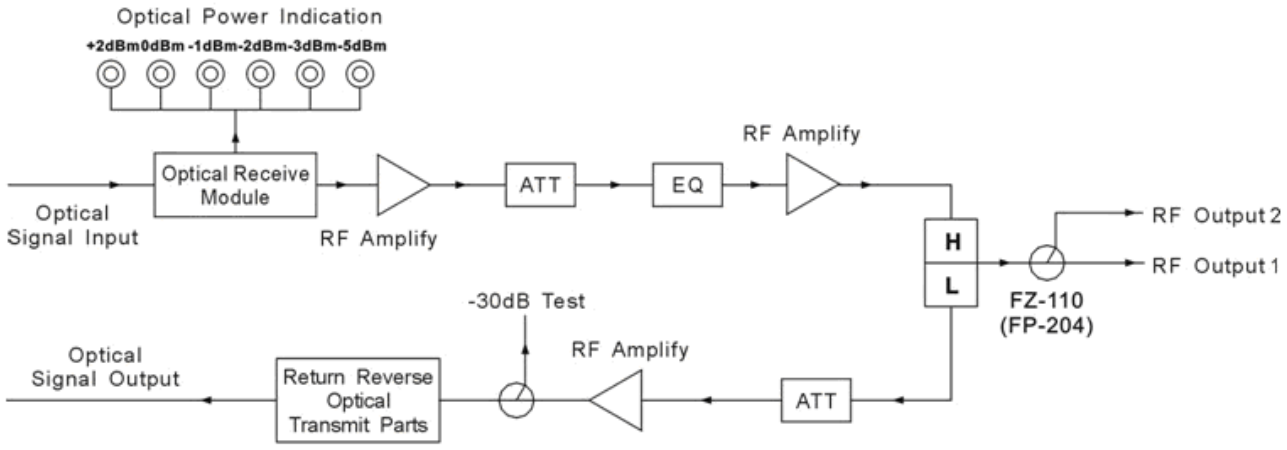
★ Testing Environment

- Below part of optical receiver: Standard optical fiber together with transmitter makes the testing circuit. Set with 59 PAL-D analog TV channel signal at range of 45 MHz~550MHz in the fix index loss of circuit. Transmit digital modulation signal at rang of 550MHz~862MHz, the electricity level (8 MHz bandwidth) digital signal is lower 10dB than analog signal of carrier electricity level; the input of optical receiver is –2dBm, output level of RF is 90dBuV with lean beam of 9dB output, measure C/ CTB, C/ CSO, C/ N.
- Above part of the optical transmitter: Flatness in circuit to noisy-power ratio is get to the range of circuit index of above optical transmitter and receiver.
- Note: Rated Output Level: when the receiving optical power is -2dBm, and the four output ports are allocated output.

★ Friendly Notice

Suggest you setting the RF signal at the range of 6~9dB lean beam output.

Ⅳ. Block Diagram



Ⅴ. Order Direction

■ The default set of optical interface is FC/APC before delivery, if you have special request, please note it in your order.

■ Please note brand name and model of optical receive and RF amplify module.

■ Model instruction：

OPR-8602RP WR-7502RP—Optical detector is PHILIPS optical receive module.

OPR-8602RO WR-7502RO—Optical detector is PHOTON optical receive module.

OPR-8602RE WR-7502RE—Optical detector is E-O PIN photodiode.