

Codificacion: WT-8604JL	INFORMACION TECNICA	
Fecha: 05/01/2011		
Hojas 1 de 6		
Asunto	Nodo Optico 2 / 4 Salidas	

Descripcion:

WT8604JL Optical Receiver

WT8604JL is our new high-class 4-way output CATV optical receiver. The pre-amplifier adopts GaAs MMIC meanwhile post-amplifier adopts GaAs module, the optimization circuit design and with 10 years design experience that match to high performance index. The microprocessor control working status meanwhile LED digital display parameter that makes more convenience operation and becoming main products in CATV network.

I. Performance Characteristics

- With PIN Photoelectric Converter and High Response.
- Optimization circuit design, SMT process production, optimization signal path, fluency photoelectric signal transmission.
- With specialized RF attenuate IC, Good linear of RF attenuation and equality and high accuracy.
- GaAs amplify, power double output, high gain and low distortion.
- Microprocessor control working status, LED shows all parameters, convenience operation and high stability.
- Optimization AGC performance, when the input power range is $-9 \sim +2$ dBm, the output level, CTB and CSO keep constantly.
- Backup data communications interface, it is convenient to connect with network management responder, connecting with network management system.

Codificacion: WT-8604JL	INFORMACION TECNICA	
Fecha: 05/01/2011		
Hojas 2 de 6		
Asunto	Nodo Optico 2 / 4 Salidas	

Configuracion

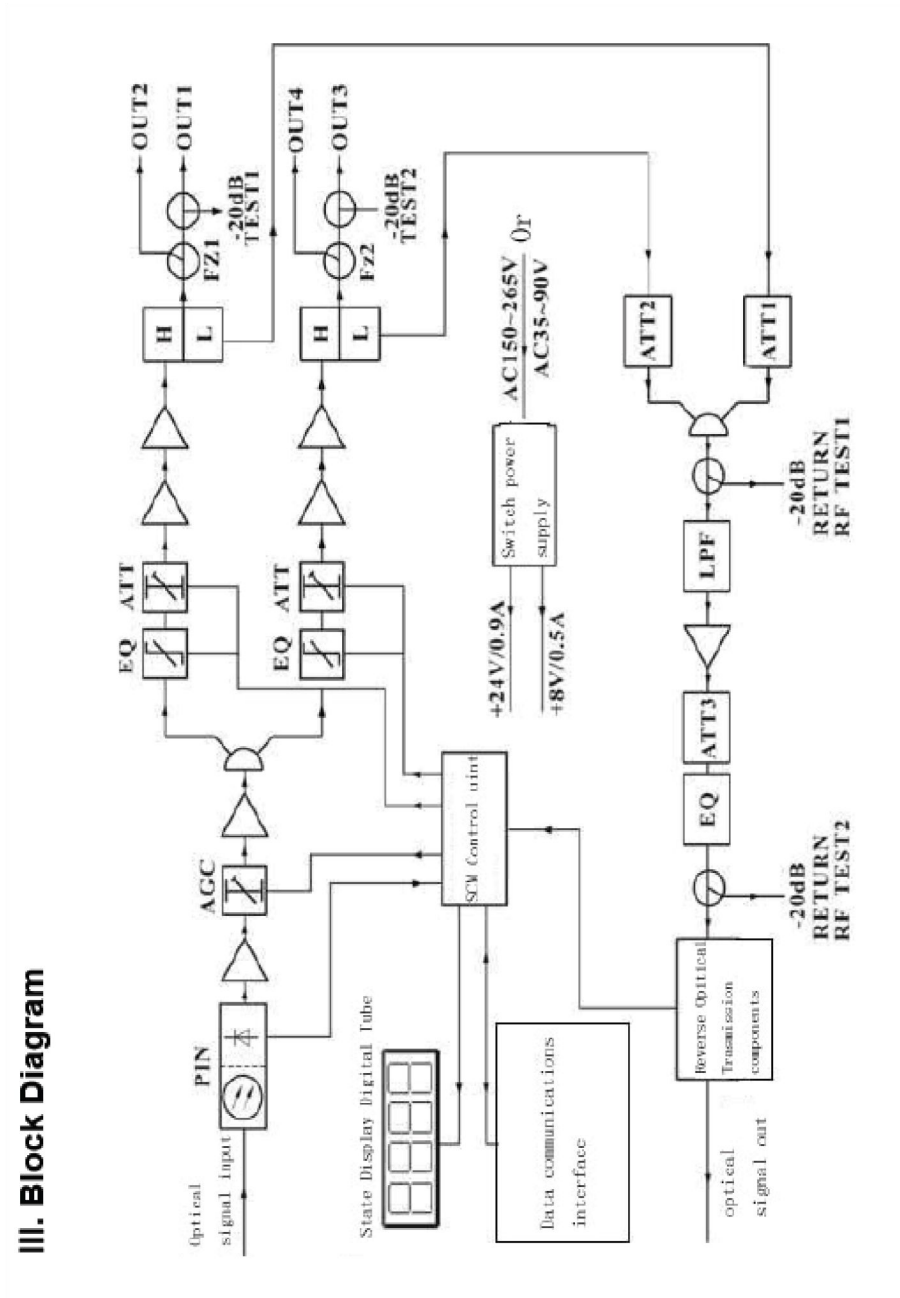

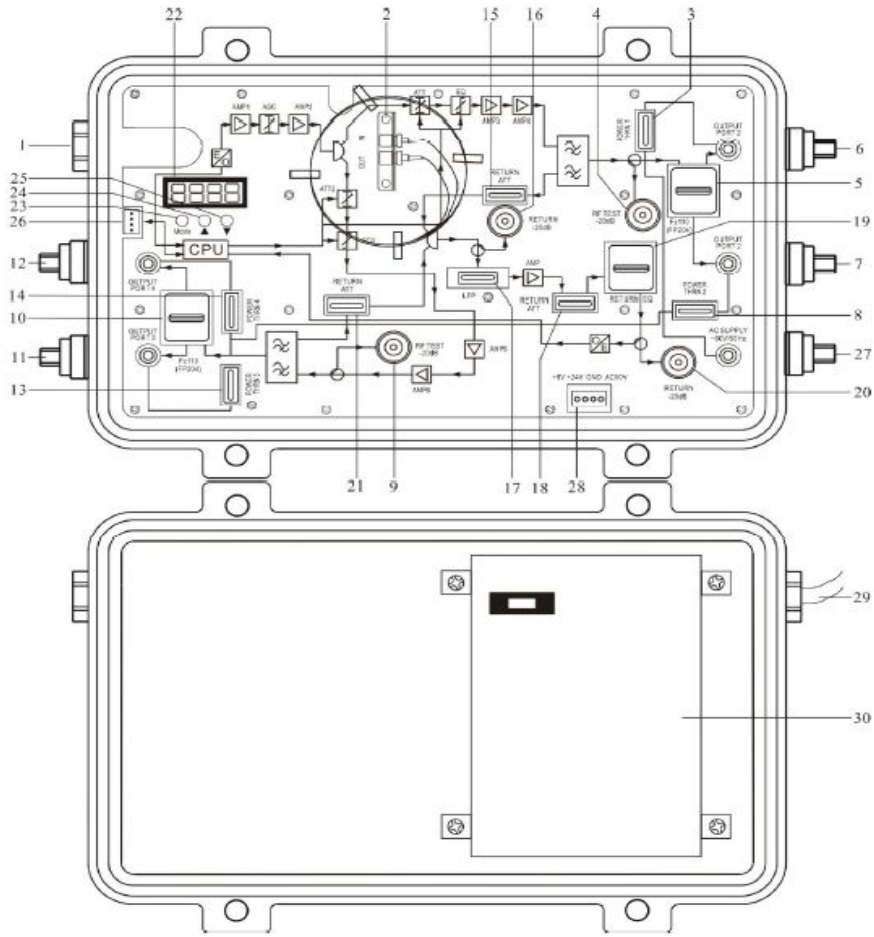


Diagrama circuital

Codificacion: WT-8604JL	INFORMACION TECNICA	
Fecha: 05/01/2011		
Hojas 3 de 6		
Asunto	Nodo Optico 2 / 4 Salidas	




- | | |
|---|--|
| <ul style="list-style-type: none"> 1. Optical Fiber Input 3. Power Pass Inserter 1 5. Output Tap or Splitter 1 7. RF Output 2 9. -20dB Output RF TEST 11. RF Output 3 13. Power Pass Inserter 3 15. Reverse RF ATT 1 17. Low Access Filter 19. Reverse RF EQ 21. Reverse RF ATT 3 23. Control Mode Selection Button 25. Down Button 27. AC60V Input (B) 29. AC220V Input (A) | <ul style="list-style-type: none"> 2. Optical Fiber Adapter 4. -20dB Output RF TEST 1 6. RF Output 1 8. Power pass inserter 2 10. Output Tap or Splitter 2 12. RF Output 4 14. Power Pass Inserter 4 16. -20dB Reverse RF TEST 1 18. Reverse RF ATT 2 20. -20dB Reverse RF TEST 2 22. State Display Digital Tube 24. UP Button 26. Digital Transmission Surface 28. Main Board Power Input 30. Power Supply |
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Codificación: WT-8604JL	INFORMACION TECNICA	
Fecha: 05/01/2011		
Hojas 4 de 6		
Asunto		

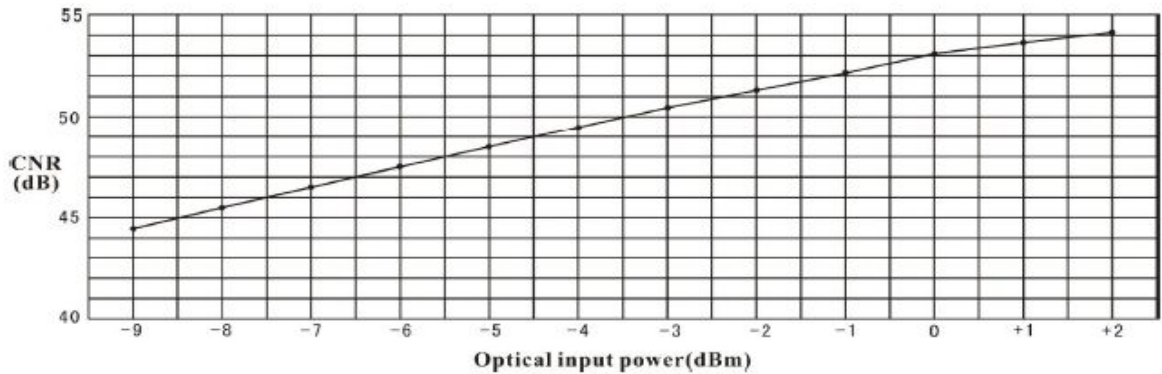
II. Technical Parameter

Item	Unit	Technical Parameter	
Optical Parameter			
Receive Optical Power	dBm	-9 ~ +2	
Return Loss	dB	>45	
Optical Wavelength	nm	1100 ~ 1600	
Connector Type		FC/APC or SC/APC	
Fiber Type		Single Mode	
Circuit Performance			
C/N	dB	≥51 (-2dBm Input)	
C/CTB	dB	≥65	Output Level 108 dBμV Balanced 6dB
C/CSO	dB	≥ 60	
RF Performance			
Frequency Range	MHz	45 ~862	
Flatness in Band	dB	±0.75	
Rated Output Level	dBμV	≥ 108	
Max Output Level	dBμV	≥ 112	
Output Return Loss	dB	≥16(45-550MHz)	≥14(550-862MHz)
Output Impedance	Ω	75	
Electronic Control EQ Range	dB	0 ~ 10	
Electronic Control ATT Range	dBμV	0 ~ 20	
Return Transmit Performance Parameter			
Optical Parameter			
Optical Transmit Wavelength	nm	1310±10	
Output Optical Power	dBm	1 ~ 5	
Connector Type		FC/APC or SC/APC	
RF Parameter			
Frequency Range	MHz	5 ~ 65 or according to the requirement of user	
Flatness in Band	dB	±1	
Input Level	dBμV	85 ~ 90	
Output Impedance	Ω	75	
General Parameter			
Supply Voltage	V	A : AC (150~265) V ; B : AC (35~90) V	
Operating Temperature	□	-40~60	
Storage Temperature	□	-40~65	
Relative Humidity	%	Max 95% No Condensation	
Consumption	VA	≤30	
Dimension	mm	240 (L) L 240 (W) L 150 (H)	

Note: The parameter of forward RF is tested under the condition of using GaAs 25 dB double power module in the last stage, if you use other module, the parameter will be slightly different.

Codificacion: WT-8604JL	INFORMACION TECNICA	
Fecha: 05/01/2011		
Hojas 5 de 6		
Asunto	Nodo Optico 2 / 4 Salidas	

IV. Relation Table of Input Optical Power and CNR




V. Function Display and Instructions


Mode: selection button of control mode, there are seven types of work mode.


▲ : Up button , in the ATT or EQ mode increase ATT or EQ value.


▼ : Down button , in the ATT or EQ mode decrease ATT or EQ value.


Explain by following pictures.

Mode 1:  Input Optical Power (Unit: dBm)
 10: Show low optical power or no optical power
 !: Show temporary input optical power


Mode 2:  The actual value of +8V Operating Voltage
 2: Show the temporary actual value of +8V operating voltage


Mode 3:  The actual value of +24V Operating Voltage
 3: Show the temporary actual value of +24V operating voltage


Mode A1:  RF Attenuation Amount, adjust by the button of ▲ or ▼, the Maximum range is 20dB
 A !: ATT Mode, show attenuation-amount of control and display in RF 1 channel


Mode E2:  RF Equilibrium Amount, adjust by the button of ▲ or ▼, the Maximum range is 10dB :
 E !: EQ Mode, show Equilibrium Amount of control and display in RF 1 channel


Codificacion: WT-8604JL	INFORMACION TECNICA	
Fecha: 05/01/2011		
Hojas 6 de 6		
Asunto	Nodo Optico 2 / 4 Salidas	

Mode A2:  RF attenuation amount adjust by the button of ▲ or ▼ the maximum range is 20dB
A2
 ATT mode show current attenuation amount of control and display in RF 2 channel access

Mode E2:  RF equalization amount, adjust by the button of ▲ or ▼ the maximum range is 10dB
E2
 Eq Mode, show equalization amount of control and display in RF 2 Channel access

Mode 4:  Input the current real network system channels, so press "▲" or "▼" to adjust, can input 200 max.
4
 This manual can be showed that the input real channels, so that calculate the RF level output

Mode 5:  Output level from RF port 1 (dBuV)
5 Display the output level from RF port1 in current system.

Mode 5:  Output level from RF port 2 (dBuV)
6 Display the output level from RF port1 in current system

The following menu for two reverse optical components made of the state shows that if the reverse is not configured optical components made when the two were set to hide the menu. insert the optical components made after the two menu will automatically display

Mode 6:  reverse output optical power (dBm)
00: Current output opticalpower
7: Reverse output optical power

Mode 7:  Reverse caser bias current (mA)
8: Reverse laser bias current