Modelo: OWS860G-S	ESPECIFICACIONES TECNICAS	
Fecha: 2013		
Hojas 1 de 1		
Asunto	Nodo Optico 4 Salidas Independientes	

1. Summary

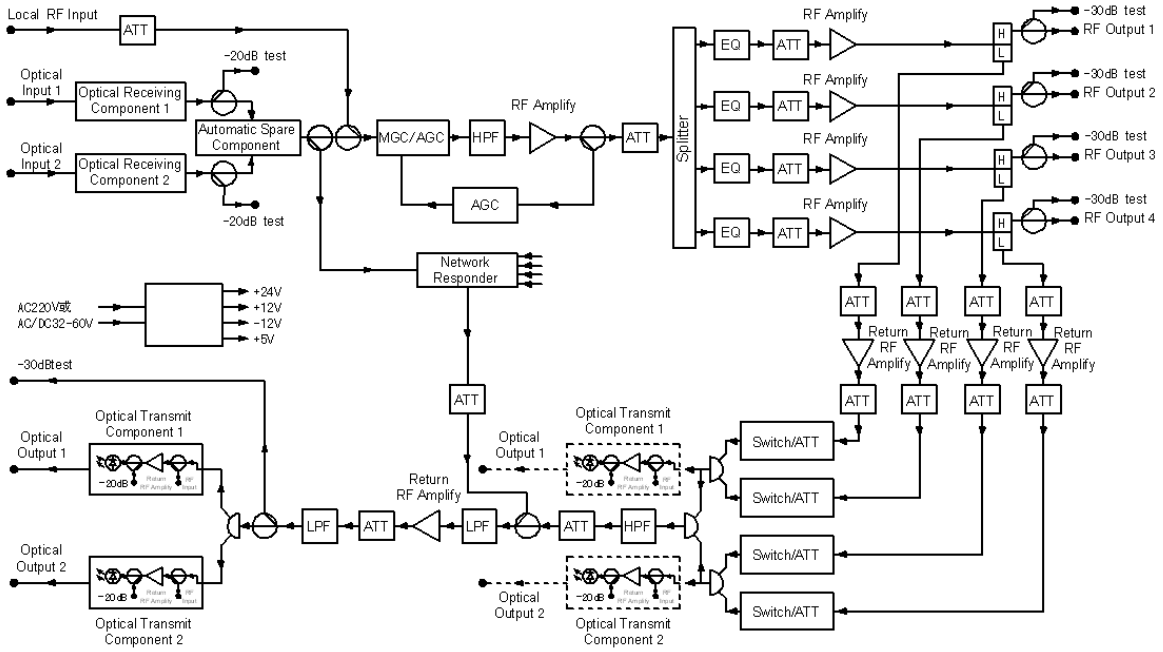
It is the Bi-directional Optical Connecting equipment which is suitable for the HFC structure of Bi-directional district Broad Band network。

Plug-in inspecting circuit, have the function of SCTE, HMS and IEC standard network compact. It could be long-distance controlled by network responder.

2. Performance Characteristic

- Adopt PHILIPS, PHOTON and PIN high-reliable optical inspector, make sure the good index of the C/N. Imported the PHILIPS、NEC or MOTORALA low-noisy push-pull amplify module and PHILIPS or MOTOROLA double power module to make sure the good index of the C/CTB, C/CSO.
- Adopt the PHILIPS low-noisy return amplify module, chose the DFB laser to be the return optical source to make sure the good index of the NPR.
- Configured two optical receiving module, two return optical transmit module and two power supply at the most to make sure the reliability and safety of the system.
- 108dBuV from four output ports, every port can be adjusted separately, driving about 100 terminal consumers without any amplifier devices.
- Plug-in fix dual-filter, fix ATT and EQ for the testing port to make sure adjusting conveniently.
- Adopt Bi-directional filter in return part and low-noisy pre-amplifier in reverse part, compensate the loss of the reverse part to meet the low level (70dBuV) from signal to optical output port, improving the reverse noise.
- High-access filter (15M~1G or choose) restrain the noise 15MHz. Low-access filter (5~65M or choose) restrain forward 85MHz signal which pass from Dual-filter to return path, prevent over carry of the return laser.
- Waterproof cast-aluminium, high-reliable switch power, anti-thunder system, make sure the properly operation.

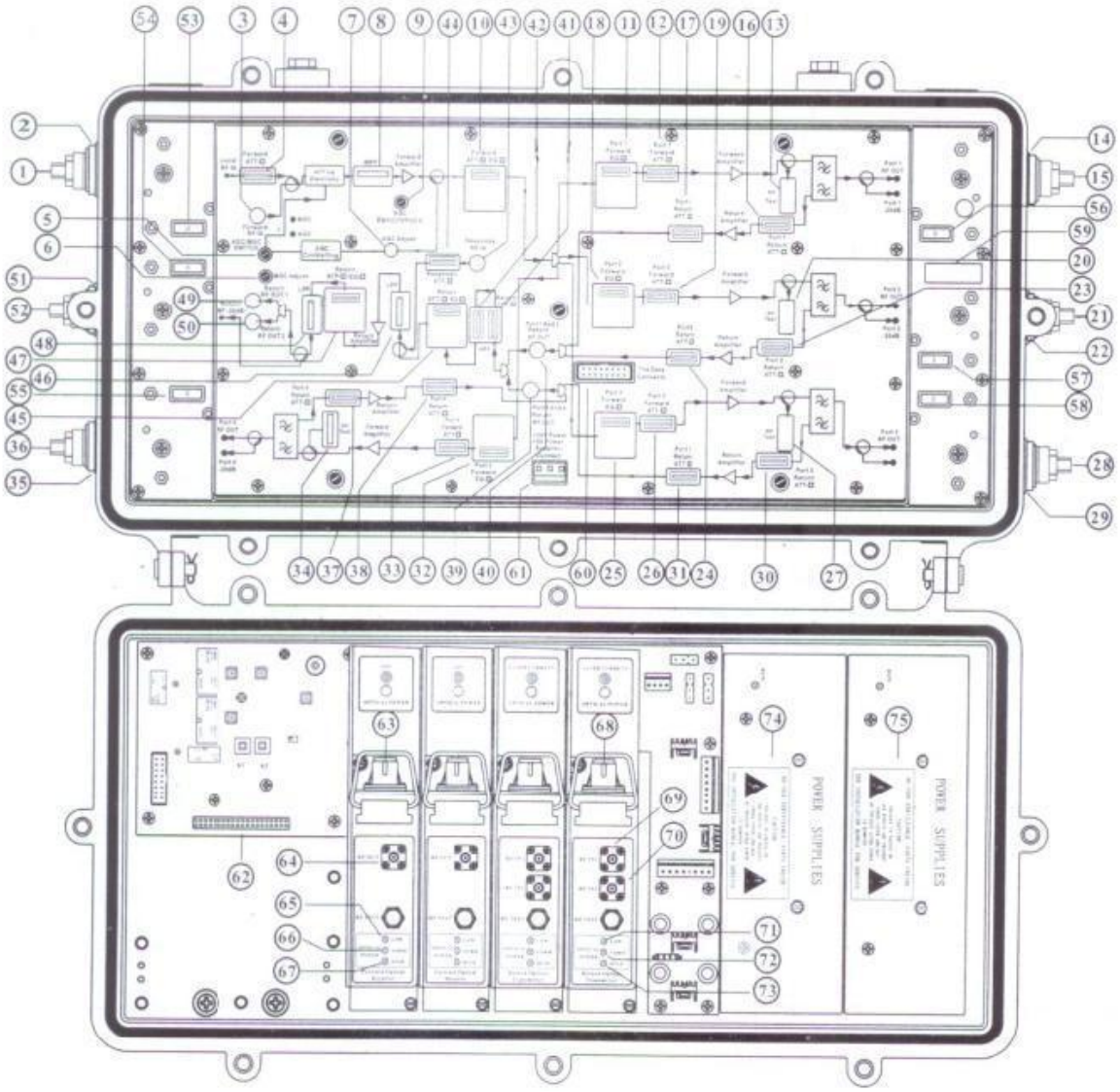
3. Principle Drawing



4. Performance Parameters

Item	Unit	Parameter
Forward Optical Receive Part		
Optical Parameter		
Input Optical Power	dBm	-7~+2
Suggestion Range	dBm	-3~+1
Optical Return Loss	dB	＞45
Optical Receive Wavelength	nm	1100~1600
Optical Connect Type		FC/APC, SC/APC
Optical Fiber Type		Single Mode
Link 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	±0.75 (550~750/862 MHz)
Standard Output Level	dBu V	≥104
Max Output Level	dBu V	≥108
AGC Control Range	dB	± 8 (84 signals)
Output Return Loss	dB	≥14(550~750/862 MHz)
Output Impedance	Ω	75
Reverse Optical Receive Part		
Optical Parameter		
Optical Transmit Wavelength	nm	1310±10, 1550 ±10
Laser Type		DFB or FP
Output Optical Power	mW	0.5~2
Optical Connect Type		FC/APC, SC/APC
RF Parameter		
Frequency Range	MHz	5~(30~65)
Flatness in Band	dB	±1.5
Input Level	dBu V	70~75
Input Return Loss	dB	≥16
Output Impedance	Ω	75
NPR Range	dB	≥10 (NPR ≥30dB)
General Performance		
Power Voltage	V	A;AC 135~250V B: AC/DC 32~60V(60Hz)
Operating Temperature	℃	-40~60
Stock Temperature	℃	-40~65
Humidity	%	Max 95%
Consumption	VA	≤80
Dimension	mm	550L x 280W x 218H

5. Preduct Structure



1.local RF Input	2. local RF Test	3. Forward Signal Input
4.LocalForwardInputATT	5. AGC/MGC	6. MGC Adjust Trimmer
7.AGC Adjust Trimmer	8.ForwardPre-highpassFilter	9.MGC Adjust
10. ForwardPre-EQ(ATT)	11. Forward RF EQ	12. Forward RF ATT
13. Forward RFLevelTest	14. -30dB Forward test	15. Forward RF Output
16. Reverse ATT	17. Reverse ATT/Switch	18. Forward EQ
19. Forward ATT	20. Forward RF Level Test	21. RF Output
22. -30dB Forward test	23. Reverse ATT	24. Reverse ATT/ Switch
25. Forward EQ	26. Forward ATT	27. Forward RF Level Test
28. Forward RF output	29. -30dB Forward test	30. Reverse ATT
31. Reverse ATT/Switch	32. Forward RF EQ	33. Forward RF ATT
34. Forward RFLevelTest	35. -30dB Forward test	36. Forward RF Output
37. Reverse RF AT		38. Reverse ATT2/Switch
39.P3,P4ReverseCombineOutput	40.P1,P2ReverseCombineOutput	41. Reverse ATT/Switch

	43.Responder Input	44. Responder ATT
42. Reverse High-pass Filter		
45. Reverse EQ/ATT	46. Reverse Low-pass Filter	47. Reverse EQ/ATT
48. Reverse Low pass Filter	49. Reverse RF Output	50. Reverse RF Output
51. Reverse Transmit Lever Test	52. AC 60V Power Input	53.AC 60V Power Pass Inserter
54. AC 60V Power Pass Inserter	55. AC 60V Power Pass Inserter	56. AC60VPowerPassInserter
57. AC 60V Power Pass Inserter	58. AC 60V Power Pass Inserter	59.Discharge Tube
60. Mainboard Data Connector	61.Mainboard+24V,+5VDirectCurrent Connector	62.Network Responder Connector
63. Forward Receiving Module Signal Input	64. Forward Receiving Module RF Output	65.Warning of Input Optical Power Lower.
66. Proper Input Optical Power	67. Warning of Input Optical Power Higher	68.Reverse Module Optical Signal Output
69. Responder RF Input	70.Reverse RF Input	71.Warning of Reverse Transmit Power Output Lower
72. Proper Output Power of Reverse Transmit		73. Warning of Reverse Transmit Power Output Higher
74.Switch Power 1	75.Switch Power 2	

5. Model Instruction

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