NGB-9912 (2 outputs) NGB-9924 (4 outputs)

AGC, SNMP Bi-direction Optical receiver

PRODUCT DESCRIPTION

NGB-9912 (two-port), NGB-9924 (four-port), is a type of high-grade AGC, Network management, Bi-direction, outdoor optical receiver. Various operating parameters of machine are microprocessor-controlled, LED display. Through the keys of machine can adjust and set EQ 、 ATT. Optional network transponder, implement remote network management. Large dynamic range of optical AGC characteristics, NGB-9912 (two-port), NGB-9924 (four-port) high output ,for FTTC, FTTN fiber access network. As a unit of CATV network RX, is a high performance, highly flexible, cost-effective CATV opical receiver.

NGB-9912 / N: AGC, Bi-direction, 2 ports output outdoor optical receiver, With network management Transponder.

NGB-9912 / O: AGC, Bi-direction, 2 ports output outdoor optical receiver, Without network management Transponder.

NGB-9924 / N: AGC, Bi-direction, 4 ports output outdoor optical receiver, With network management Transponder.

NGB-9924 / O: AGC, Bi-direction, 4 ports output outdoor optical receiver, Without network management Transponder.

PRODUCT FEATURES

▶Excellent AGC characteristics: Pin: –9.0dBm~+2dBm, ΔVo : ≤±1. 0dB.

▶Variety of machine operating parameters controlled by the microprocessor , LED display.

▶Output level and slope, adjust and set through the microprocessor.

▶High performance, high reliability.

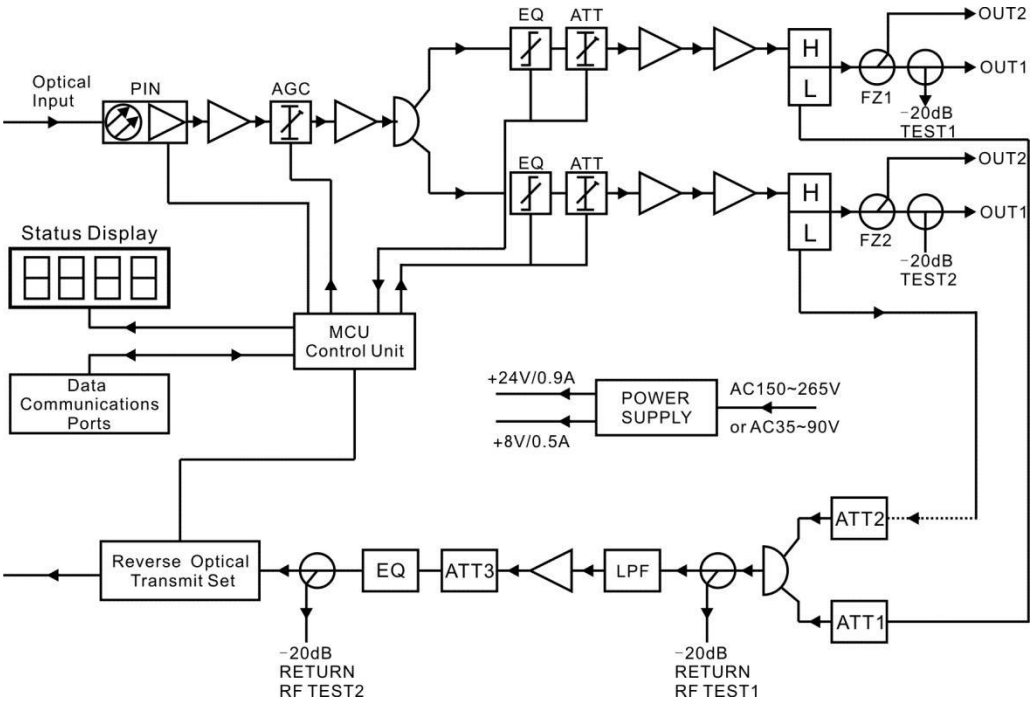
▶Best cost performance of industry.

MAIN APPLICATION

▶HFC

▶FTTC、FTTN

BLOCK DIAGRAM OF NGB-9912 , NGB-9924



TECHNICAL INDEX

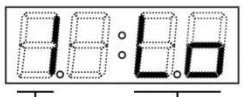
Performance			Index	Additional
Optical feature	Operating wavelength	(nm)	1260~1620	
	Response degrees	(A/W)	≥0.85	1310nm
			≥0.9	1550nm
	Optical AGC control range	(dBm)	-9~+3	
	Optical return loss	(dB)	≥50	
	Fiber linker		LC/APC	Optional SC/APC, FC/APC
RF feature	Operating Bandwidth	(MHz)	47~862	NGB-9912, NGB-9924/□-0
			52~862	NGB-9912, NGB-9924/□-4
			88~862	NGB-9912, NGB-9924/□-6
	Flatness	(dB)	≤±1.0	
	Output level	(dBμV)	108 ±1.0	Pin:-9.0~+3.0dBm
	AGC feature	(dB)	≤±1.0	Pin:-9.0~+3.0dBm
	Output level adjust range	(dB)	-20~0	
	Output slope adjustment range	(dB)	-10~0	

	Return loss	(dB)	≥14	47 ~ 862MHz
	Output Impedance	(Ω)	75	
	RF connector		F-Female	
Link feature	Test channel		59CH(PAL-D)	47~550MHz analog
			Digital QAM	550-1050MHz
	OMI	(%)	3.8	
	CNR	(dB)	≥52	Pin=-2dBm
	CTB	(dB)	≥-65	Vo = 108 dBμV
	CSO	(dB)	≥-60	Vo = 108 dBμV
	HUM	(dB)	≥-60	
Return transmit feature	optical emission wavelength	(nm)	1310	43×4、63×4
			1550	45×4、65×4
			1590	49×4、69×4
			1610	46×4、66×4
	Laser type		DFB	4×D4、6×D4
			FP	4×F4、6×F4
	Optical output power	(dBm)	2~4	
	Optical connetor type		LC/APC	Optional SC/APC, FC/APC
	RF operating bandwidth	(MHz)	5~42	NGB-9912, NGB-9924/□-4
			5~65	NGB-9912, NGB-9924/□-6
	Input level	(dBμV)	85~90	
	Input Impedance	(Ω)	75	
	Laser turn-on time	(us)	0.5~1.0	
	Laser turn-off time	(us)	0.5~1.5	
General feature	SNMP network management interface		RJ45	
	Power supply	(V)	AC (150~265) V	AC220
			AC (35~90) V	AC60
	Power consumption	(W)	≤15	
	Work Temp.	(℃)	-40~60	
	Storage temp.	(℃)	-40~65	
	Relative humidity	(%)	5~59	
	Size (W)×(D)×(H)	(mm)	240×240×150	

FUNCTION DISPLAY AND OPERATING INSTRUCTIONS

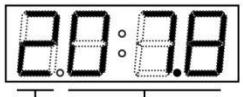
Mode:selection button of control mode, there are seven types of work mode.
▲ : Up button, in the ATT or EQ mode increase ATT or EQ value.
▼ : Down button, in the ATT or EQ mode increase ATT or EQ value.
Explain by following pictures.

Mode 1:



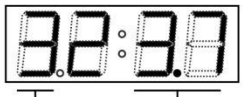
Input Optical Power (Unit:dBm)
Lo:Show low optical power or no optical power
1 :Show temporary input optical power

Mode 2:



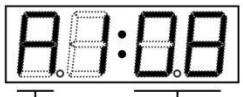
The actual value of +8V operating voltage
2 :Show the temporary actual value of +8V operating voltage

Mode 3:



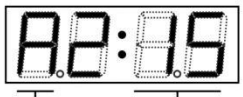
The actual value of +24V operating voltage
3 :Show the temporary actual value of +24V operating voltage

Mode A1:



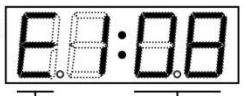
A1: ATT mode ,show attenuation of control and display in RF 1 channel

Mode A2:



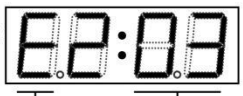
A2: ATT mode ,show attenuation of control and display in RF 2 channel

Mode E1:



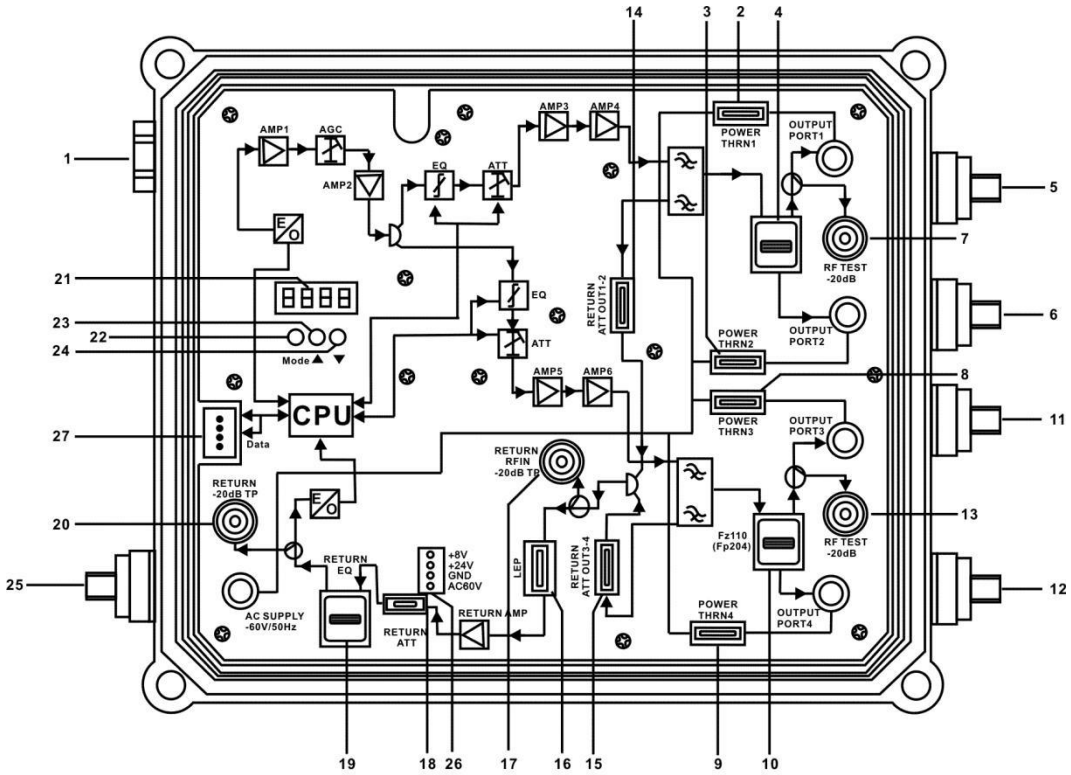
E1: EQ mode ,show attenuation of control and display in RF 1 channel

Mode E2:



E2: EQ mode ,show attenuation of control and display in RF 2 channel

STRUCTURE DIAGRAM OF NGB-9912, NGB-9924



1.Optical Fiber Input

2.Power Overcurrent Inserter 1

3.Power Overcurrent Inserter 2

4.Output Tap or Splitter 1

5.RF Output 1

6.RF Output 2

7.-20dB RF TEST 1

8.Power Overcurrent Inserter3

9.Power Overcurrent Inserter 4

10.Output Tap or Splitter 2

11.RF Output 3

12.RF Output 4

13.-20dB RF TEST 2

14.Reverse RF Attenuation (OUT 1-2)

15.Reverse RF Attenuation (OUT 3-4)

16.Reverse Low-pass Filter

17.-20dB Reverse RF Test 1

18.Reverse RF Attenuation

19.Reverse RF Equalizer

20.-20dB Reverse RF Test 2

21.State Display Digital Tube

22.Mode Selection Button

23.Up Button

24.Down Button

25.AC60 Input

26.Main Power Interface

27.Data Communcation Interface

PRODUCT SERIES

Model number	Under line operating wavelength	Number of output port	Network management (optional)	Return launch (optional)
NGB-9912 / N-0000	47~862MHz	2	Transponder with network management	Without return launch
NGB-9912 / N-4×××	52~862MHz			With return launch, 5~42MHz
NGB-9912 / N-6×××	88~862MHz			With return launch, 5~65MHz
NGB-9912 / O-0000	47~862MHz		Transponder without network management	Without return launch
NGB-9912 / O-4×××	52~862MHz			With return launch, 5~42MHz
NGB-9912 / O-6×××	88~862MHz			With return launch, 5~65MHz
NGB-9924 / N-0000	47~862MHz	4	Transponder with network management	Without return launch
NGB-9924 / N-4×××	52~862MHz			With return launch, 5~42MHz
NGB-9924 / N-6×××	88~862MHz			With return launch, 5~65MHz
NGB-9924 / O-0000	47~862MHz		Transponder without network management	Without return launch
NGB-9924 / O-4×××	52~862MHz			With return launch, 5~42MHz
NGB-9924 / O-6×××	88~862MHz			With return launch, 5~65MHz

MODEL EXPLANATION