

# **RLG804C GPON ONU**

## **Specifications**

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# 1 OVERVIEW

## 1.1 Product Positioning

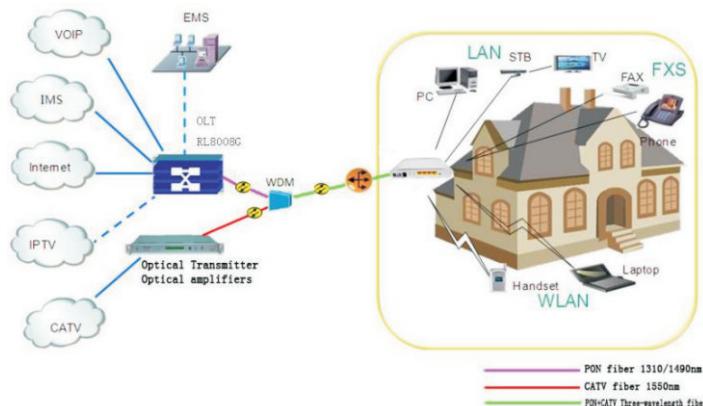
Optical network terminal products RLG804C is launched for the CATV FTTH network construction. The CATV optical receiver of RLG804C with technical features of low optical power received. RLG804C GPON ONU supports G.984 series recommendations, supporting international standards and industry technical standards. With higher reliability, better QoS guarantee, manageable, scalable, flexible networking features, can be satisfied with high-speed broadband access needs of the customer or broadcast.



Picture 1-1 RLG804C Appearance

## 1.2 Network Mode

RLG804C is the FTTH mode terminal equipment which designed for indoor applications, specific application refers to Picture 1 - 2.

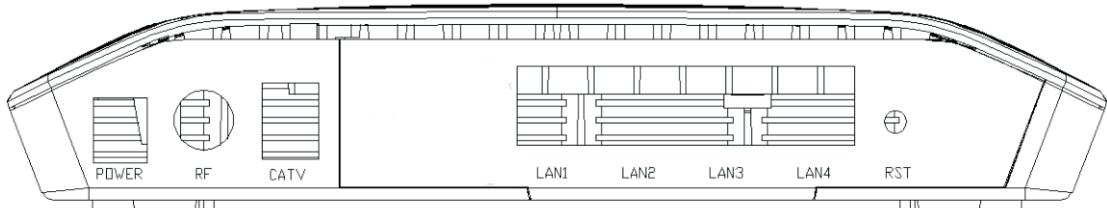


Picture 1-2 RLG804C products Network diagram

## 2 HARDWARE FEATURES

### 2.1 Interface of device

RLG804C equipment interface as Picture 2-1,



Picture 2-1 RLG804C pack panel picture

Table 2-1 Description of RLG804C interface

Interface	Description
POWER	DC power adapter, DC12V.
RF	CATV RF output port, connect a TV or set-top box via this interface.
CATV	CATV optical input interface, support SC / APC optical pigtail connector for connecting CATV access networks PON + CATV three wavelength signals.
Unidentified (knob)	RF knob, located in the upper port direction which is located on the cabinet from the left side, the optical machine is used to adjust the RF output level. Adjustable range: -18~0dB.
LAN1~LAN4	RJ45 Port connects to local internet, speed 10/100Mbps automatically
RST button	Reset factory button for 5 seconds to reset factory configuration.

### 2.2 Indicators of device

Table 2-2 RLG804C statement

Indicators	status	Description
POWER	Light on	ONU power supply normally
	Light off	ONU no power supply
TV	Light on	CATV optical receiver output level normal
	Flash	CATV optical receiver output level lower than normal or failure
OPT	Light on	CATV optical receiver signal normal
	Flash	CATV optical signal power rate over normal or

		less than normal status
LOS	Light on	ONU hot received optical signal
	Flash	ONU receiving power rate lower than optical receiver sensitivity
	Light off	ONU receiving power rate normal
ETH1~ETH4	Light on	network port linked, but no data transmitting
	Flash	network port data pass
	Light off	ONU has power supply or internet cable unlinked
SYS	Light off	PON module no power supply
	Green	PON module power supply
	Yellow	System start normally

## 3 TECHNICAL SPECIFICATIONS

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### 3.1 Physical structure, Environment and Electrical parameter

Table 3-1 RLG804C specification and working environment

Parameter	Nominal
Measurement	191mm*133mm*34mm(L*W*H)
Net weight	0.5kg
Typical power consumption	<7W
Noise	None
Cooling style	Naturally cooling
Power supply	12V DC( By external AC/DC adapter )
Installation style	Support PC, wall mount or put inside of information box.
Environment	0~45°C
Atmospheric pressure	70~106Kpa
MTBF	50,000hours
MTTR	30minutes
Parameter	Nominal

### 3.2 GPON Specifications

Table 3-2 RLG804C GPON specification

Parameter	Nominal
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Fiber style	Single mode		
Wavelength	Transmitting end: 1310 +/- 20nm Receiving end: 1490 +/- 10nm		
PON interface standard	ITU-T G.984.2/ITU-T G.984.3/ITU-T G.988 Class B+		
PON interface receiving rate	1.244Gbps		
PON interface transmitting rate	2.488Gbps		
Output optical power	Min: 0dBm	Max: +5dBm	
Receiver damage threshold	7dBm		
The length of the optical calligraphic link	Max 20km		

### 3.3 CATV optical receiver specifications

Table 3-3 RLG804CCATV Optical receiver parameter

Item			Unit	Parameter
Optical parameter	Receiving optical wavelength	nm		1200~1650
	Receiving optical power	dBm		-15~-2
	Reflection loss	dB		50
	Connector	-		SC/APC
	Fiber type	-		Single mode
	Isolation (WDM)	Forward channel	dB	40
		Reflection channel	dB	22
RF parameter	Frequency range	MHz		45 ~ 1000
	In-band flatness	dB		$\pm 1$
	Output reflection loss	dB		14
	Nominal output level	dBuV		=75 ± 1 (AGC range: 12~-2dBm)
	Attenuation range	dB		-18~-0
	Carrier-to-noise ratio (C/N)	dB		46
	(C/CTB)	dB		65
	(C/CSQ)	dB		65
	Output impedance	$\Omega$		75
Others	Power supply (DC)	V		12
	Power consumption	W		1.5
	Working temperature	°C		0 ~ +45
	Storage temperature	°C		-40 ~ +75
	Relative humidity	%		Maximum 95% non-condensing