# GN40GAC GPON ONU (4GE+USB+GN40GAC) Specifications

Version	Date	Author	Reviewers	Remark
V1.0	2017/2/18			Shall not disclose to any third party

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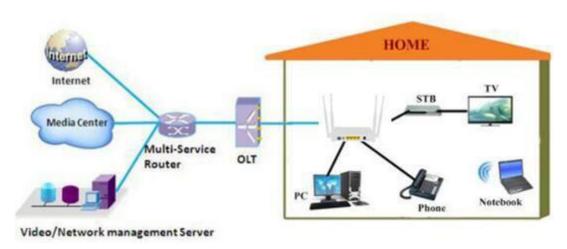
# 1.OVERVIEW

### 1.1 Product Positioning

GN40GAC terminal devices are designed for fulfilling FTTH and triple play service demand of fixed network operators or cable operators. The box is based on the mature Gigabit GPON technology, which have high ratio of performance to price, and the technology of 802.11 ac/n WiFi, Layer 2/3. They are highly reliable and easy to maintain, with guaranteed QoS for different service. And It is fully compliant with technical regulations such as ITU-T G.984.x and technical requirement of GPON Equipment from China Telecom.

#### 1.2 Network Mode

GN40GAC is the FTTH mode terminal equipment which designed for indoor applications. Specific application refers to Picture 1-1



Picture 1-1 GN40GAC Products Network diagram

# 2. HARDWARE FEATURES

#### 2.1 Interface of device

GN40GAC product figure as Picture 2-1



Picture 2-1 GN40GAC product figure

Table 2-1 Description GN40GAC equipment Interface

Port Type	Function
PON port	Connect PON port with internet by SC type, single mode optical fiber cable
USB(optional)	Connect the devices with USB port
LAN 4/3/2/1 port	RJ45Port connects to local internet, 4 GE port
Reset button	Press down reset button and keep 1-5 seconds to make the device restart and
(RST)	recover from the factory default Settings.
PWR port (DC12 V)	Connect with power adapter
Power turn on/off	Power turn on/off

## 2.2 Indicators of device

Table 2-2 GN40GAC LED statement

Indicators	status	Description
POWER	Light on	ONU power supply normally

	Light off	ONU no power supply	
PON	Light on	ONU link active	
	Flash	ONU manage to link	
	Light off	ONU receiving power rate lower than optical receiver sensitivity	
LOC	Blink	Device does not receive optical signals.	
LOS	off	Device has receivedoptical signal.	
	ON	WiFi turn on	
2.4G	OFF	Device is power off or WiFi turn off	
	Blink	WiFi turn on and with ongoing data transmission	
	ON	WiFi turn on	
5G	OFF	Device is power off or WiFi turn off	
	Blink	WiFi turn on and with ongoing data transmission	
INTERNET	On	Internet is effective.	
	off	Internet is ineffective.	
LAN 1-4	Light on	network port linked, but no data transmitting	
	Flash	network port data pass	
	Light off	ONU no power supply or internet cable unlink	

# 3.TECHNICAL SPECIFICATIONS

# 3.1 Physical structure, Environment and Electrical parameter

Table 3-1 GN40GAC specification and working environment

Parameter	Nominal
ETH Interface	4GE Ports
Dimension	236mm×148mm×31mm (L×W×H)
Net weight	0.24kg
Typical power consumption	<10W
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

## 3.2 GPON Interface Specifications

Table 3-2 GN40GAC GPON Interface

Parameter Nominal
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Connector style	SC/PC
PON quantity	1
Fiber style	Single mode
Wavelength	TX: 1310 +/-20nm
	RX: 1490 +/-10nm
PON interface standard	ITU-T G.984.2/ITU-T G.984.3/ITU-TG.988 Class B+
PON interface receiving rate	2.488Gpbs
PON interface transmitting rate	1.244Gpbs
Output optical power	Min: 0dBm Max: +5dBm
Opticalreceiver sensitivity	Precede -28dBm
The length of the optical link	Max 20km

# 3.3 WIFI Specifications

Table 3-3 GN40GAC WIFI Specifications

Standard		IEEE 802.11 ac/b/g/n		
	Frequency	2.4~2.4835GHz		
		5GHz: Low frequency 5.15GHz~5.25GHz、		
		Middle frequency $5.25 \text{GHz} \sim 5.35 \text{GHz}$		
		High frequency 5.725GHz∼5.825GHz		
	Transmission speed	2.4GHz Frequency:		
		IEEE 802.11b : 11/5.5/2/1M(Auto)		
		IEEE 802.11g: 54/48/36/24/18/12/9/6(Auto)		
		IEEE 802.11n: 270/243/216/162/108/81/54/27Mbps,up to 300Mbps		
M'E.		5GHz Frequency:		
WiFi		IEEE 802.11n: Highest transmission speed up to 300Mbps		
parame		IEEE 802.11ac: Highest transmission speed up to 867Mbps		
ter	Channel number	2.4GHz : 13 5GHz: 4		
	Spread-spectrum	DSSS(Direct sequence spread spectrum)		
	Technique			
	Data Modulation	DBPSK、DQPSK、CCK and OFDM(BPSK/QPSK/16-QAM/64-QAM)		
	Sensitivity@PER (Package error rate)	270M: -68dBm@10% PER; 130M: -68dBm@10% PER;		
		108M: -68dBm@10% PER; 54M: -68dBm@10% PER		
		11M: -85dBm@8% PER; 6M: -88dBm@10% PER		
		1M: -90dBm@8% PER;		
	Antenna	5dBi Antennas		

# 3.4 Special function

- Support TR069,NAT,DMZ,DNS features
- Support MU-MIMO
- Support Easy Mesh
- Support Multiple ssid
- Support Multiple VLAN
- > Support IPV6, PPPoE, DHCP and Static IP configuration for WAN Interface
- > Support IP, MAC filtering, Firewall Functionality in routed mode