

**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 (RST)	Press down reset button and keep 1-5 seconds to make the device restart and 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
LOS	Blink	Device does not receive optical signals.
	off	Device has received optical signal.
2.4G	ON	WiFi turn on
	OFF	Device is power off or WiFi turn off
	Blink	WiFi turn on and with ongoing data transmission
5G	ON	WiFi turn on
	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
Optical receiver 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
WiFi parameter	Frequency	2.4~2.4835GHz 5GHz: Low frequency 5.15GHz~5.25GHz、 Middle frequency 5.25GHz~5.35GHz、 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
		5GHz Frequency: IEEE 802.11n: Highest transmission speed up to 300Mbps IEEE 802.11ac : Highest transmission speed up to 867Mbps
	Channel number	2.4GHz : 13 5GHz: 4
	Spread-spectrum Technique	DSSS(Direct sequence spread spectrum)
	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