GE8004U-HZ (1GE+3FE+1POTS+1USB +WIFI)

Product Overview:

GE8004U-HZ is an ONT device terminal in the XPON system. In conjunction with OLT, ONT can provide a variety of broadband services to connected users, such as Internet, VoIP, IPTV, Video Conference and other services. Based on mature, stable and cost-effective XPON technology, it provides one PON interface, one 1000M electrical interfaces and three 100M electrical interfaces, one USB interface, one POTS port. Single fiber wavelength division multiplexing (downlink 1490nm, uplink 1310nm) is adopted, only one fiber is needed to connect with OLT, and the maximum transmission distance is up to 20km, which supports power outage report function and local WEB management function.

Product Interface:

Interface: optical port, voice port, network port 1- network port 4, power socket, power switching, USB port.
Indicator Light: WPS, wireless, USB, Telephone, network port 1-4, Optical signal, PON registration, power supply.

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Product Feature:

1. HGU ONU product form, supporting bridge and NAT mode;

2. BOB product process;

3. 802.11B /g/n wireless access;

4. 2*3dBi external dual antenna is used wirelessly.

5. USB interface supports configuration saving and recovery;

6. Provide a VOIP interface to connect the ordinary telephone;

7. 12V /1.0A External power supply.

➤ **Port Features:**

>1 PON ports (1.25G)

>1*10/100/1000M + 3*10/100M port

>1 voice port

➤ **EPON**

> Meets IEEE 802.3 EPON MAC standard;

> Supports a downlink rate of 1.25gbit /s and an uplink rate of 1.25gbit /s.

> Supports DS/US FEC;

> Supports the downstream encryption and decryption function;

> Supports bandwidth allocation;

> Supports synchronous Ethernet;

> Supports RFC4837;

➤ **GPON**

> Compliant with ITU G.984.x

> Bandwidth US: 1.24416G/DS: 2.48832G

> Supports 32 TCONT, 128 GEM

> Supports AES, key switching

> Supports upstream and downstream FEC

> Supports DBRu

> HW dying gasp

➤ **VIOP Character:**

> Single channel option, 105V most battery design

> Available in either PCM/SPI or ZSI

> Compact structure, 84-pin 7*7mm QFN components

> VOIP processor and SOCS adopt the 5th generation line interface

> The voice path SDK and vp-api-ii software can implement FXS functions

> Energy saving switch control structure: up to 65vrms open circuit, up to 5REN load

> Two-layer PCB design, complete bandwidth BOESCHT function

> Analog telephone adapter (ATAs)

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➢ **Business Performance**

> Supports bridge mode and routing mode, wan three-tier routing NAT forwarding;

> Supports Tag/Untag Ethernet frames of 802.3 and 802.1q;

> Supports firewall, IP address filtering, MAC address filtering, wireless MAC address filtering, accurate control;

> Supports port priority queues;

> Supports ipv4 default routing, static routing, routing table view, ipv6 static routing, port or VLAN binding;

> Supports DMZ function, port mapping function, port triggering configuration;

> Supports multicast, DN configuration, DDNS, UPNP function, DSCP mapping.

> Supports OAM and EEELLDP;

> Ethernet supports 802.1Qav and 802.1AS/1588v2 timed synchronization;

> Supports DOS attack prevention;

> Supports IEEE 802.3az energy-saving Ethernet capability, and supports 1000base-t, 100base-tx full duplex and 10base-full/half duplex modes.

> Supports flow control based on entry. For businesses exceeding the flow, you can choose to drop packet or Pause frame backpressure.

>Support QoS function;

➢ **Specification:**

Description	Symbol	Test Condition	Min	Typ	Max	Unit
Ambient temperature, offset	Ta		-40		+85	℃
Digital and analog power supply voltages	DVDD,AVDD		3.135	3.3	3.465	VDC
Ultimate condition: battery voltage (active state)			-105VDC TO -12VDC			VDC
Line current	ILA		18	25	45	mA
Ringing voltage	VRING	5REN		50	65	Vrms
Second-line return loss	RL	200to3400HZ		30		dB
Longitudinal balance		1KHZ		58		dB
Device power consumption (continuous)	PD(max)	85℃		1.5		W
Connect to ambient thermal resistance				29		℃/w

Power consumption(Buck-Boost)	symbol	Test condition	TYP	Unit
Shutdown	PD	Switcher off	8	mW
disconnect			37	
Low power Idle mode		On-hook	52	
Idle		On-hook	98	
active		Off-hook,300Ω,ILA=25mA	324	
ringing		50Vrms,1REN	462	

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➢ **Support Protocols and Standards:**

>ITU-T G.984.1/2/3/4、IEEE802.3、IEEE802.3u、、IEEE802.3x、IEEE802.3z、IEEE802.1d、IEEE802.1p、IEEE802.1q、IEEE802.1x、RFC1155、RFC1157、RFC1112、RFC1113 wait.

➢ **WIFI Feature**

>Technical Norms: IEEE802.11b, IEEE802.11g, IEEE802.11n;

>Debug Mode:

802.11b: DSSS/BPSK/QPSK/CCK

802.11g: OFDM/DSSS/BPSK/QPSK/CCK;

802.11n: OFDM/DSSS/BPSK/QPSK/CCK;

>Speed:

802.11b: compatibility 11,5.5,2,1 Mbps;

802.11g: compatibility 54,48,36,24,18,12,9,6 Mbps;

802.11n: compatibility 130,117,104,78,65,58,52,39,26,19.5,13,6.5Mbps;

>Channel: 1~11 (USA, Canada); 1~13 (Europe); 1~14 (Japan);

>Frequency Domain: 2.4GHz-2.4835GHz;

>Transmission Power:

11b: 17dBm +/- 1.5dBm;

11g: 14dBm +/- 1.5dBm;

11n: 11dBm +/- 1.5dBm;

>Receive Sensitivity:

11b: 83dBm;

11g: 70dBm;

11n: 64dBm;

>Security Safe: 64/128-bits WEP; WPA/WPA2 wait;

>The Antenna Number: 2*3dBi Internal Antenna;

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Application: FTTH FTTX

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