# GL-GE8013U-MTK

# 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 100Melectrical interfaces, one USB interface, one pots interface. 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**

- 1. Interface: voice port, network port 4- network port 1, USB port, power socket, power switching.
- 2. Indicator Light: WPS, WLAN, USB, TEL, network port 1-4, internet, Optical signal, PON registration, power supply.

## **Specification**

Description	Symbol	Test Condition	Min	Тур	Max	Unit
Ambient temperature, offset	Та		-40		+85	℃
Digital and analog power supply voltages	DVDD,AVDD		3.135	3.3	3.465	VDC
Ultimate condition:			-105VD	VDC		
battery voltage (active state)						

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		°C/W
Power Consumption (Buck-Boost)	symbol	Test condition		TYP			Unit
Shutdown	PD	Switcher off		8			mW
Disconnect	_			37			mW
Low Power Idle Mode			-hook	52			mW
Idle			-hook	98			mW
Active			-hook, 300Ώ, =25mA	324			mW
Ringing		50\	/rms,1REN	462			mW

#### **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.

## **EPON Feature**

- 1. Meets IEEE 802.3 EPON MAC standard
- 2. Supports a downlink rate of 1.25gbit /s and an uplink rate of 1.25gbit /s.
- 3. Supports DS/US FEC
- 4. Supports the downstream encryption and decryption function
- 5. Supports bandwidth allocation
- 6. Supports synchronous Ethernet
- 7. Supports RFC4837

## **GPON Feature**

- 1. Compliant with ITU G.984.x
- 2. Bandwidth US: 1.24416G/DS: 2.48832G
- 3. Supports 32 TCONT, 128 GEM
- 4. Supports AES, key switching
- 5. Supports upstream and downstream FEC
- 6. Supports DBRu
- 7. HW dying gasp

#### **Business Performance**

- 1. Supports bridge mode and routing mode, wan three-tier routing NAT forwarding
- 2. Supports Tag/Untag Ethernet frames of 802.3 and 802.1g
- 3. Supports firewall, URL filter, firewall, MAC filter, port filter, protocol control
- 4. Supports port priority queues control
- 5. Supports IPV4 default routing, static routing, routing table view, IPV6 static routing, port or VLAN binding
- 6. Supports Select a device registration type, including loid, password, or SN
- 7. Supports multicast, DDNS, UPNP function, IGMP v1/v2/v3, IGMP/MLD snooping, IGMP/MLD PROXY.
- 8. Supports OAM and EEELLDP
- 9. Supports Automatically synchronize network time
- 10. Supports DMZ configuration, virtual host
- 11. Supports IEEE 802.3az energy-saving Ethernet capability, and supports 1000base-t, 100base-tx full duplex and 10base-full/half duplex modes.
- 12. Supports flow control based on entry. For businesses exceeding the flow, you can choose to drop packet or pause frame backpressure.
- 13. Support QoS function

#### **VIOP Character**

- 1. Single channel option, 105V most battery design
- 2. Available in either PCM/SPI or ZSI
- 3. Compact structure, 84-pin 7\*7mm QFN components
- 4. VOIP processor and SOCS adopt the 5th generation line interface
- 5. The voice path SDK and vp-api-ii software can implement FXS functions
- 6. Energy saving switch control structure: up to 65vrms open circuit, up to 5REN load
- 7. Two-layer PCB design, complete bandwidth BOESCHT function
- 8. Analog telephone adapter (ATAs)

#### WIFI feature

- 1. Technical norms: IEEE802.11b, IEEE802.11g, IEEE802.11n
- 2. Debug mode: 802.11b: DSSS/BPSK/QPSK/CCK
- 3. 802.11g: OFDM/DSSS/BPSK/QPSK/CCK
- 4. 802.11n: OFDM/DSSS/BPSK/QPSK/CCK
- 5. speed: 802.11b: compatibility 11,5.5,2,1 Mbps
- 6. 802.11g: compatibility 54,48,36,24,18,12,9,6 Mbps
- 7. 802.11n: compatibility 130,117,104,78,65,58,52,39,26,19.5,13,6.5Mbps
- 8. Channel: 1~11 (USA, Canada) 1~13 (Europe) 1~14 (Japan)
- 9. frequency domain: 2.4GHz-2.4835GHz
- 10. Transmission power: 11b: 17dBm +/- 1.5dBm
- 11. 11g: 14dBm +/- 1.5dBm
- 12. 11n: 11dBm +/- 1.5dBm
- 13. receive sensitivity: 11b: 83dBm
- 14. 11g: 70dBm
- 15. 11n: 64dBm

- 16. Security safe: 64/128-bits WEP WPA/WPA2 wait
- 17. The antenna number: 2\*3dBi Internal Antenna

# Support protocols and standards

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# **Application**

