

# MANUAL DE USUARIO

# GEPON ONU HG326E



# **Chapter1: Overview**

## **1.1 Product Description**

HG326E terminal devices are designed for fulfilling FTTH and triple play service demand of fixed network operators or cable operators. These boxes are based on the mature Gigabit EPON technology, which have high ratio of performance to price, and the technology of 802.11n WiFi (2T2R), Layer 2/3, and high quality VoIP as well. They are highly reliable and easy to maintain, with guaranteed QoS for different service. And they are fully compliant with technical regulations such as IEEE802.3ah and technical requirement of EPON Equipment (V2.1 and above version) from China Telecom.



Figure 1 HG326E



## **1.2 Application Chart**

Video/Network management Server

## **1.3 Technical parameters**

Technical item	HG326E
PON interface	1EPON connector,SC single-mode/single-fibre, symmetric 1.25Gbps
Wavelength	Tx1310nm,Rx 1490nm
Optical interface	SC connector
Interface	4x 10/100Mbps auto adaptive Ethernet interfaces. 10/100M Full /Half Duplex, RJ45 connectors. 2x POTS,RJ11 connectors
Wireless	Compliant with IEEE802.11b/g/n, 300Mbps, 2T2R one internal antenna and one external antenna
LED	13, For Status of POWER、PON 、LOS、WAN、WIFI、POTS、FE、Pair、USB.
Operating condition	-5°C~55°C, 10%~90% (non-condensed)
Storing condition	-30°C~60°C, 10%~90% (non-condensed)
Power supply	DC 12V,1/1.5A
Power	≤10W
consumption	
Dimension	185mm×135mm×45mm(L×W×H)
Net weight	0.34Kg

Table 1 Technical parameters

# **Chapter2: Installation**

## 2.1 Installation Requirements

#### **Installation Environment Requirements**

HGU equipment must be installed in the interior, and to ensure the following conditions:

- Confirmation at the HGU installation at sufficient space to facilitate cooling machine.
- HGU suitable working temperature of -5  $^{\circ}$ C ~ 55  $^{\circ}$ C, humidity 10% to 90%.
- Device workplace should avoid radio transmitters, radar stations, and high-frequency interference from power equipment.

#### **Equipment Installation**

1. Installed on the desktop

Place the machine on a clean bench, this installation is relatively simple, you can observe the following operation:

- Ensure the smooth workbench.
- Around the device enough space for heat dissipation.
- 2. Mounted on the wall
- Observation HGU equipment chassis two cruciform recess, in accordance with the position of the groove, installed two screws in the wall.
- The original selected two mounting screws gently snap into recesses aligned.
- Slowly let go, so that the device under the support of the screw hanging on the wall.



### 2.2 Panel

Figure 3 Panel lights

(		) (5) (6)						
0.02	(1) (2)	) (3) (4)	(5) (6) (7) (8) (9)					
LED	Mark	Status	Description					
		ON	The device is powered up.					
Power(1)	PWR	OFF	The device is powered down.					
Optical		Blink	Device does not receive optical signals.					
signal (2)	LOS	OFF	Device has received optical signal.					
		ON	The device is registered to the EPON system.					
Registrati	PON	OFF	Device is not registered to the EPON system.					
01(3)		Blink	Device is registering.					
\A/A NI(4)	\A/ANI	ON	WAN is effective.					
VVAN(4)	VVAIN	OFF	WAN is ineffective.					
	WIFi	ON	WiFi turn on					
Wireless		OFF	Device is power off or WiFi turn off					
(5)		Blink	WiFi turn on and with ongoing data transmission					
	EV04	ON	Device has registered to the soft-switch, but without ongoing data transmission					
Pots(6)	FXS1 FXS2	OFF	Device is power off or not registered to the soft-switch					
		Blink	The port is with ongoing data transmission					
	ETH1	ON	Port is connected properly.					
Ethernet	iTV	Off	Port connection exception or not connected.					
(7)	ETH3 ETH4	Blink	Port is sending or/and receiving data.					
		ON	WPS client is connecting					
Pair(8)	Pair	OFF	Does not use WPS or WPS client is connected( LED turn off after 5 minutes of successful connection)					
		ON	USB device is connected, but without ongoing data transmission					
USB(9)	USB	OFF	Device is power off or USB device is not connected					
		Blink	USB is with ongoing data transmission					



#### Figure 4 Back panel



Port Type	Function					
PON port	Connect PON port with internet by SC type, single mode optical fiber					
	cable					
EXS port	Connect the telephone with FXS port by telephone wire. If you only					
	have one telephone, you should use FXS1 port.					
Ethernet port	Connect PC with EPON HGU Ethernet port by RJ-45 Cat5 cable.					
WiFi pair button	Press down WiFi pair button and keep 0.1-3 seconds for WPS function					
(wireless pair)						
WiFi turn on/off (WiFi)	Press down WiFi turn on/off and keep 3 seconds to enable/disable WiFi					
Reset button (Reset)	Press down reset button and keep 1-5 seconds to make the device					
	restart and recover from the factory default Settings.					
USB port	External USB port, can connect to USB storage device.					
Power port (DC12 V)	Connect with power adapter					
Power turn on/off	Power turn on/off					

Table 3 Back panel

Figure 5 Side panel



Port Type	Function
Indicator LED turn on/off	Press down to turn LED on, Pop up to turn LED off.
	Table 4 Side papel

#### Table 4 Side panel

# 2.4 Equipment List

Contents	Quantity	Contents	Quantity
HGU	1 pcs	Power adapter	1 pcs
User manual	1 pcs	QC card	1 pcs
Network cable	1 pcs	-	



# **Chapter3: Web Management**

HG326E provides simple Web management functions, including modifying WAN, LAN, WiFI, Router or Bridge Mode, Voip, Firmware upgrades and other functions.

### 3.1 Default configuration

The following is the default device configuration information.

- Local (LAN access) Username: admin , Password: admin
- LAN port management IP address: 192.168.1.1/24

#### **3.2 Basic Configuration**

Figure 6 Web Login

WEB Login								
Username Password	admin							
Submit	Cancel							

**Web** login default username: admin password: admin

#### Figure 7 LAN settings

Status	Netwo	ork Securi	ty Applic	ation	Management	Dia	ignose
nternet	LAN	WLAN	TR069	Q	S Time Ser	ver	Route
LAN Set	tings						
	3						
Configure	e the IP addi	ress and subnet ma	sk. click "Save/A	pply"butt	ton to save the LAN	l config	juration da
IP Address:	:	192.168.1.1					
Subnet Mas	sk:	255.255.255.0					
C Disabl	le DHCP server						
Enable	e DHCP server	12					
Beginr	ning IP Address	:192.168.1.2					
Ending	) IP Address:	192.168.1.254					
Subne	t Mask:	255.255.255.0					
100000000	Time:	One Day 🔽					
Lease							
C Enable	e DHCP server i	relay					

**IP Address and Subnet Mask:**LAN port IP address and mask. **DHCP option:**Enable or disable DHCP server and DHCP server relay.

Note: DHCP server changes take effect after the device is restarted.

#### Figure 8 WAN Connection

Network	Status	Network	Security	ty Application	
полнотк	Internet	LAN	WLAN	TR069	
Internet LAN VLAN	Uplink Mode:	EPON 💌			
WLAN VLAN	Connection N	ame; Add WAN	Connection 💌		
Rate Limited	Mode:	Bridge	~		
Loop Test	MTU:	1500			
	Enable Vlan:				
	Vlan ID:	10			
	802.1p:	0 🕶			
	VLAN Mode:	Transpar	cent 💌		
	Enable QinQ:				
	Service Mode	INTERNET	· ·		
	Port Binding:				
	Port_1	F Port_2			
Network	Status	Network	Secur	ity Applicatio	
Network	Internet	LAN	WLAN	TR069	
Internet	1				
LAN VLAN	Uplink Mode	EPON	~		
WLAN VLAN	Connection	Name: 1_INTE	RNET_B_VID_0	•	
Rate Limited	Mode:	Route	*		
Loop Test	Protocol Mo	de: IPv4	~		
	C DHCP	Automa	tically obtain an IP	address from your ISP	
	C Static	Configu	re a static IP addre	ess supplied by your ISP	
	C PPPoE	Select t	his option if your I	SP uses PPPoE	



**Network->Internet** Menu.By modifying these parameters can add a WAN connection.

Mode: WAN connection mode, Bridge or Route.

Enable Vlan: unchecked means disabled.

802.1p: VLAN priority, 0~7.

Vlan ID: 1~4094

**VLAN Mode:** Tag or transparent. Tag means upstreams will be added a VLAN tag, while transparent will not.

Enable QinQ: if checked, there will be double VLANs in upstreams.

Service Mode: What service the WAN used for.

**Port Binding:**Bind LAN port and SSID to WAN connection.

**Protocol Mode:** Configuring a route WAN should specify protocol mode and an IP address, etc. Choose one method to get an IP address among DHCP, static and PPPoE.

#### Figure 9 WLAN settings

Status	Network	Security	Applic	ation Mar	nagement Di	agnose
Internet	LAN	WLAN	TR069	QoS	Time Server	Route
Wireles	s Basic					
This pag port, hid to differe Click on '	e is used to confi e SSID from bein ent country standa "Save/Apply" to t	gure basic feature g scaned by AP, ards and so on. ake effect the bas	es of wireless l set wireless ne ic configuratio	AN port. Inclu. twork name (S on of wireless.	ding enable or disa SID), set channel f	ble wireless LAN requency according
🔽 En	able Wireless					
Hic	de Access Point					
Cli	ents Isolation					
T Dis	sable WMM Advertise					
En En	able Wireless Multica	st Forwarding (WMF)	1			
SSID:	Broadcom1					
BSSID:	00:1D:2B:F8:78:F	31				
Country:	UNITED STATES		~			
Max Client	:s: 16					

**WLAN Basic** Menu displays the current configuration information. Modify these parameters to change WiFi basic features.

Application	Status	Network	Sec	urity App	olication	Management	Diagnose	Help
	NAT U	IPNP	VoIP	IGMP	CA	TV MAC Limite	d MLD	Oth
General Settings	VoIP Basic Se	ettings						
VoIP Advanced	Input the VoIP service.	parameters,	then click	the Start/Stop b	utton to sa	ve parameters and st	art/stop the VoIP	
	Interface Name:	Ar	ny_WAN 🔽 (I	Note: You must	restart the	VoIP service to take	effect.)	
	Region :	US	SA - NORTH	AMERICA	(Note: Yo effect.)	ou must restart the Vo	DIP service to take	
	Proxy Server:	22	.10.113.30	Port: 506	0			
	External Proxy S Registering Serv	erver: er: 22	.10.113.30	Port: 506	0			
	Line	Phon	e1	Phone2				
	Enable	<b>v</b>		2				
	Phone Number	83221133		83221133				
	Username	abc121		abc122				
	Password	******		*****				
		20	~	20 👽				

#### Figure 10 VoIP Basic

VoIP Basic Settings: The configuration of the SIP general parameters. Including registering server address, proxy server address, phone number, username.

Figure 11 Update Software

Management	Status	Network	Security	Applicat	ion Management	Diagnose			
Management	User Manage	evice Manage	Log File	Maintain	LOID				
Device Reboot	Tools	Update Softwa	e						
Update Image USB Backup	Step 1: 0	Step 1: Obtain an updated software image file from your ISP.							
System Backup Load Default	Step 2: E image file	Enter the path to t	he image file loca	tion in the box	below or click the "Bro	wse" button to locate the			
	Step 3: Click the "Update Software" button once to upload the new image file.								
	NOTE: The update process takes about 2 minutes to complete, and your DSL Router will reboot.								
	Software File Name: 浏览								
				Update Softw	are				

Update image menu is used to update software. Enter the path of the image file in the box and click Update Software botton, then it will be reboot.