



AK-G461/G461W GPON HGU

Introduction

AK-G461/G461W is a GPON Home Gateway Unit with brand new appearance, it's a fast, convenient, flexible, secure and highly integrated broadband connection device. It supports routing and bridging function, it's very suitable for home and small business users.

G461/G461W support optical fiber access with 2.5Gb/s downstream and 1.25Gb/s upstream two-way data transmission, conform with point-to-multipoint data service of ITU-T G.984.2 and ITU-T G.984.5, client support IEEE802.11b/g/n 300Mbps wireless connection, 2CH VOIP voice, 1 HOST USB2.0 interface, 1 CATV and 4 self-adaptive 10/100/1000M Base-T LAN interface which conform with IEEE802.3 and 802.3u.

Appearance



G461



G461W

Parameters

Product Specification	
Upstream Interface	<ul style="list-style-type: none"> ● PON Interface <ul style="list-style-type: none"> ■ 1 optical fiber access port ■ Conform with ITU-T G.984.2, ITU-T G.984.4 and ITU-T G.988 ■ Downstream: 2.5Gbps(wavelength: 1490nm) ■ Upstream: 1.25Gbps(wavelength: 1310nm) ■ Average luminescence power: 0.5-5dBm(zero luminescence power:-45dBm) ■ Receiving Sensitivity: up to -28dBm



Downstream Interface	<ul style="list-style-type: none"> ● LAN Interface <ul style="list-style-type: none"> ■ 4 10/100/1000 Base-T RJ-45 Ethernet interface ■ Support straight crossed cable, support auto-negotiation ● Wireless <ul style="list-style-type: none"> ■ IEEE 802.11n、IEEE 802.11g、IEEE 802.11b ■ Two built-in antenna ■ The highest connecting rate: 300Mbps ■ Coverage: indoor 100m max, outdoor 300m max. ■ Transmitting Power <ul style="list-style-type: none"> 11B_POWER = 15.5dBm 11G_POWER = 15.5dBm 11N_HT20_POWER= 15.5dBm 11N_HT40_POWER = 14.5dBm ■ EVM <ul style="list-style-type: none"> 11B_EVM =-10dB 11G_EVM =-30 dB 11N_HT20_EVM =-29 dB 11N_HT40_EVM =-29 dB ● CATV <ul style="list-style-type: none"> G461:double-fiber tri-direction G461W: single-fiber tri-direction RF frequency range: 47MHz — 1000MHz RF output impedance :75Ω
USB Interface	<ul style="list-style-type: none"> ● 1 USB 2.0 HOST interface which can provide 5V voltage with max current 1A ● Support external storage device
Voice Interface	<ul style="list-style-type: none"> ● Support SIP protocol ● Support multi voice encoding format: PCMU, PCMA, G.722, G.723, G.726-32, G.729 ● Support voice value-added services: call forwarding, call waiting, call identification, abbreviated dialing, hot line service, do not disturb service, alarm clock, call barring, three-way calling
Power Supply	<ul style="list-style-type: none"> ● Power Consumption: 8.5W ● External Power Adapter <ul style="list-style-type: none"> ■ Input: 100-240V~50/60Hz 0.6A ■ Output: DC12V/1.5A ■ Lightning protection grade: 4KV
Product Appearance	
Buttons	<ul style="list-style-type: none"> ● 1 Power button, turn on/off the power ● 1 Rest button, restore factory settings ● 1 WLAN button, turn on/off wireless ● 1 Indicator Switch button, turn on/off the indicator
LED	<ul style="list-style-type: none"> ● WIFI (wireless) status indicator ● FXS1 (VoIP) status indicator



	<ul style="list-style-type: none"> ● FXS2 (VoIP) status indicator ● LAN4 (Ethernet port 4) status indicator ● LAN3 (Ethernet port 3) status indicator ● LAN2 (iTV) status indicator ● LAN1 (Ethernet port 1) status indicator ● LOS/PON (optical signal/optical fiber G) status indicator ● PWR (power supply) status indicator
WiFi	<ul style="list-style-type: none"> ● Two antennas
Dimension	<ul style="list-style-type: none"> ● Length: 220mm Width: 136mm Height: 38mm
Others	
Operating Environment	<ul style="list-style-type: none"> ● Working Temperature: 0°C~45°C ● Storage Temperature: -40°C~85°C ● Working Humidity: 10% ~90% RH (no condensation) ● Storage Humidity: 5% ~90% RH (no condensation)

Functions

Connection	
Upstream Connection	<ul style="list-style-type: none"> ● Support PON upstream connection <ul style="list-style-type: none"> ■ PON optical connection ■ Conform with ITU-T G.984.2, ITU-T G.984.4 and ITU-T G.988
IP	
Connection Mode	<ul style="list-style-type: none"> ● Support upstream connection <ul style="list-style-type: none"> ■ PPPoE ■ DHCP: DHCP Server; DHCP Client ■ Static Connection ■ Bridge ● Support 4096 VLAN unvarnished transmission <ul style="list-style-type: none"> ■ Support 4096 VLAN ID definition
DNS	<ul style="list-style-type: none"> ● DNS Relay, Support DDNS
Address Translation	<ul style="list-style-type: none"> ● NAT ● NAPT
Routing Protocol	<ul style="list-style-type: none"> ● Static Routing ● Dynamic Routing RIP v1/v2
Port Relay	<ul style="list-style-type: none"> ● Virtual Server ● DMZ ● UPnP
VPN	<ul style="list-style-type: none"> ● VPN Pass-through



	<ul style="list-style-type: none"> ● Support PPTP VPN ● Support IPSEC VPN ● Support L2TP VPN
ALG	<ul style="list-style-type: none"> ● FTP ALG ● SIP ALG ● TFTP ALG ● H323 ALG ● PPTP ALG ● IPSec ALG ● RTSP ALG
FTP	<ul style="list-style-type: none"> ● FTP Server ● FTP Client
IGMP	<ul style="list-style-type: none"> ● IGMP Snooping ● IGMP Proxy
Storage Sharing	<ul style="list-style-type: none"> ● Samba
IPv6	<ul style="list-style-type: none"> ● SLAAC ● DHCPv6 ● PPPoEv6 ● DNSv6
Others	<ul style="list-style-type: none"> ● Support ICMP ● Support IPPD
Bandwidth Control	
QoS	<ul style="list-style-type: none"> ● Support CAR Rate-limiting ● Support absolute priority dispatch ● Support WRR ● Support DSCP Identification ● Support 802.1P Identification
Wireless Parameters	
Basic Functions	<ul style="list-style-type: none"> ● Support Wireless Switch ● Support WPS Switch ● Support Multi SSID Setup ● Support Channel Selection ● Frequency Bandwidth: Auto, 20M, 40M
Wireless Security	<ul style="list-style-type: none"> ● Wireless MAC Address Filter ● Support 64/128 bit WEP Encryption ● WPA-PSK/WPA2-PSK、WPA/WPA2 Security Mechanism
Operating Management	
Local Management	<ul style="list-style-type: none"> ● Support local HTTP management ● Support HTTP/Telnet/FTP/TFTP software update ● Support system log



	<ul style="list-style-type: none"> ● Support configuration import/export ● Support time setting ● Support Internet time synchronization ● Conform with TR-098 and TR-104 standard, support various service configuration, including Ethernet, VoIP, WLAN etc.
Remote Management	<ul style="list-style-type: none"> ● Conform with TR-069 standard ● Support HTTP remote access management ● Support Telnet/FTP/TFTP remote access ● SNMP V1/V2/V3
Security	
Security	<ul style="list-style-type: none"> ● Support multilevel user authority ● Modify user name, password supported ● Set WAN access control supported ● Access control based on IP supported ● Access control based on MAC supported ● Parental control supported ● DOS attack refusal ● TCP/IP/Port/Connection filter rule ● MAC layer filter ● URL/Domain Name filter

Order

Model	Description
AK-G461	GPON,4*10/100/1000 Base-T, 2*POTS, 1*WLAN(802.11n), 1*USB, 1*CATV(double-fiber tri-direction)
AK-G461W	GPON,4*10/100/1000 Base-T, 2*POTS, 1*WLAN(802.11n), 1*USB, 1*CATV(single-fiber tri-direction)