

# **AK-G421W GPON HGU**

# Introduction

AK-G421W 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.

G421W 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, 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



### Parameters

| Product Specific      | ation  |
|-----------------------|--|
| Upstream<br>Interface | PON Interface  |
|                       | 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)   |
|                       | <ul> <li>Average luminescence power: 0.5-5dBm(zero luminescence power:-45dBm)</li> </ul> |



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|                          | Receiving Sensitivity: up to -28dBm   |
|--------------------------|---|
|                          | LAN Interface   |
|                          | 4 10/100/1000 Base-T RJ-45 Ethernet interface   |
|                          | <ul> <li>Support straight crossed cable, support auto-negotiation</li> </ul>              |
| Downstream               | • CATV  |
| Interface                | single-fiber tri-direction  |
|                          | RF frequency range: 47MHz — 1000MHz   |
|                          | RF output impedance :75Ω  |
|                          | • 1 USB 2.0 HOST interface which can provide 5V voltage with max current 1A               |
| USB Interface            | Support external storage device   |
|                          | Support SIP protocol  |
|                          | • Support multi voice encoding format: PCMU, PCMA, G.722, G.723, G.726-32, G.729          |
| Voice Interface          | • 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 Consumption: 8.5W   |
|                          | External Power Adapter  |
| Power Supply             | ■ Input: 100-240V~50/60Hz 0.6A  |
|                          | Output: DC12V/1.5A  |
|                          | Lightning protection grade: 4KV   |
| Product Appeara          | nce   |
|                          | 1 Power button, turn on/off the power   |
|                          | • 1 Rest button, restore factory settings   |
| Buttons                  | • 1 WLAN button, turn on/off wireless   |
|                          | • 1 Indicator Switch button, turn on/off the indicator                                    |
|                          | • FXS1 (VoIP) status indicator  |
|                          | • FXS2 (VoIP) status indicator  |
|                          | • LAN4 (Ethernet port 4) status indicator   |
|                          | • LAN3 (Ethernet port 3) status indicator   |
| LED                      | • LAN2 (iTV) status indicator   |
|                          | • LAN1 (Ethernet port 1) status indicator   |
|                          | • LOS/PON (optical signal/optical fiber G) status indicator                               |
|                          | PWR (power supply) status indicator   |
| Others                   |   |
|                          | • Working Temperature: 0°C~45°C   |
| Operating                | ● Storage Temperature: -40°C~85°C   |
| Operating                |   |
| Operating<br>Environment | • Working Humidity: 10% ~90% RH (no condensation)   |



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# Functions

| Connection             |  |  |  |  |
|------------------------|--|--|--|--|
| Upstream<br>Connection | <ul> <li>Support PON upstream connection</li> <li>PON optical connection</li> <li>Conform with ITU-T G.984.2, ITU-T G.984.4 and ITU-T G.988</li> </ul>   |  |  |  |
| IP                     |  |  |  |  |
| Connection<br>Mode     | <ul> <li>Support upstream connection</li> <li>PPPoE</li> <li>DHCP: DHCP Server; DHCP Client</li> <li>Static Connection</li> <li>Bridge</li> <li>Support 4096 VLAN unvarnished transmission</li> <li>Support 4096 VLAN ID definition</li> </ul> |  |  |  |
| DNS                    | DNS Relay, Support DDNS  |  |  |  |
| Address<br>Translation | <ul> <li>NAT</li> <li>NAPT</li> </ul>  |  |  |  |
| Routing<br>Protocol    | <ul> <li>Static Routing</li> <li>Dynamic Routing RIP v1/v2</li> </ul>  |  |  |  |
| Port Relay             | <ul> <li>Virtual Server</li> <li>DMZ</li> <li>UPnP</li> </ul>  |  |  |  |
| VPN                    | <ul> <li>VPN Pass-through</li> <li>Support PPTP VPN</li> <li>Support IPSEC VPN</li> <li>Support L2TP VPN</li> </ul>  |  |  |  |
| ALG                    | • FTP ALG/SIP ALG/TFTP ALG/H323 ALG/PPTP ALG/IPSec ALG/RTSP ALG  |  |  |  |
| FTP                    | <ul> <li>FTP Server</li> <li>FTP Client</li> </ul>   |  |  |  |
| IGMP                   | <ul><li>IGMP Snooping</li><li>IGMP Proxy</li></ul>   |  |  |  |
| Storage Sharing        | • Samba  |  |  |  |
| IPv6                   | <ul> <li>SLAAC</li> <li>DHCPv6</li> <li>PPPoEv6</li> <li>DNSv6</li> </ul>  |  |  |  |
| Others                 | Support ICMP     Support IPPD  |  |  |  |
| Bandwidth Contro       |  |  |  |  |



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| QoS             | Support CAR Rate-limiting   |
|-----------------|---|
|                 | Support absolute priority dispatch  |
|                 | Support WRR   |
|                 | Support DSCP Identification   |
|                 | Support 802.1P Identification   |
| Operating Manag | gement  |
|                 | Support local HTTP management   |
|                 | Support HTTP/Telnet/FTP/TFTP software update  |
|                 | Support system log  |
| Local           | Support configuration import/export   |
| Management      | Support time setting  |
|                 | Support Internet time synchronization   |
|                 | <ul> <li>Conform with TR-098 and TR-104 standard, support various service configuration,</li> </ul> |
|                 | including Ethernet, VoIP, WLAN etc.   |
|                 | Conform with TR-069 standard  |
| Remote          | Support HTTP remote access management   |
|                 | <ul> <li>Support Telnet/FTP/TFTP remote access</li> </ul>   |
| Management      | • SNMP V1/V2/V3   |
| Security        |   |
|                 | 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   |
| Security        | Parental control supported  |
|                 | DOS attack refusal  |
|                 | TCP/IP/Port/Connection filter rule  |
|                 | MAC layer filter  |
|                 | URL/Domain Name filter  |
|                 | 1   |

## **Dimension and Weight**

| Model    | ONU Dimension Packing Dimension |              | ONU W      | eight(kg)    |
|----------|---------------------------------|--------------|------------|--------------|
| Model    | L*W*H(mm)                       | m) L*W*H(mm) | Net Weight | Gross Weight |
| AK-G421W | 220*138*38                      | 296*179*74   | 0.38       | 0.69         |

# **Order Information**

| Model    | Description   |
|----------|---|
| AK-G421W | GPON ONU, 4*10/100/1000 Base-T, 2*POTS, 1*USB, 1*CATV(single-fiber tri-direction) |