

## Product Highlights

### Global Wireless Indoor CPE Broadband

5G IDU is highly performance Indoor Wireless AX1800 Device, which support sip voIP and 2.5Gigabit Ethernet Port.

### Wireless AX and 2.5Gigabit Ethernet

Stream HD multimedia across your home without interruption using the fastest wired and wireless technologies available today

### Simple, Secure Setup

Set up the 5G IDU in no time with the web-based setup wizard, and create secure wireless connections easily using Wi-Fi Protected Setup(WPS)



## 5G IDU

# Wireless AX1800 Dual-Band VoIP Router

## Features

### Connectivity

- Supports multiple WAN connections for flexibility, redundancy, and future connectivity
- Built-in ETH WAN for connecting to your high-speed broadband Internet connection
- 2.5Gigabit WAN port supports high-speed Internet connections of today and tomorrow
- Four Gigabit LAN ports to connect wired devices for high-speed on line activities
- Fast 802.11ax wireless for high speed connections to all of your PCs and mobile devices
- USB3.0 port to share media from a storage device

### Security

- Wi-Fi Protected Setup(WPS)to quickly and securely add devices to your network
- WPA/WPA2 encryption to secure your wireless traffic

### Ease of Use

- Quick Setup Wizard

The 5G IDU Wireless AX1800 Dual-Band VoIP Router with Sip VOIP is a highly integrated router with everything your home or small business needs for high-speed Internet access. It combines a 2.5Gigabit Ethernet Internet Port, 5G/4G mobile Internet support through 5G ODU, 5G IDU Voice over IP (VoIP), and Gigabit wireless together in a single, easy to use product that shares an Internet connection for all your devices.

## Fast and Reliable Home Network

The 5G IDU Wireless AX1800 Dual-Band VoIP Router with SIP VOIP creates ablaze eing fast home network that connects all of your devices to your broadband Internet connection. Concurrent dual-band 802.11AX brings you the future of high-band width wireless connectivity, allowing you to stream HD video, make Internet voice call sand surf the Internet from every corner of your home without interruption. Gigabit Ethernet ports provide high-speed wired connections for up to four PCs or other devices .It's stylish easy to use and provides you with are liable net work for today and tomorrow.

## Voice Over IP

The 5G IDU provides Voice over IP technology with advanced communication features, and is compatible with industry-wide phone services so you can make and receive calls reliably. Use the FXS phone port on the 5G IDU to connect an ordinary phone set for your VoIP phone calls, and use the router functions to connect all of your family members or personal to the Internet for a fast and secure online experience throughout your home or office.

## 5G IDU

# Wireless AX1800 Dual-Band VoIP Router

### Smooth Streaming with Wireless AX

The 5G IDU uses the latest Wireless AX technology, which provides transfer rates of up to 1.8Gbps<sup>1</sup>(1200ax+573.5ax). The router operates on both the 2.4GHz and 5GHz wireless bands at the same time using concurrent dual-band technology and three external antennas. This allows you to browse the web, chat and email using the 2.4GHz band, while simultaneously streaming digital media, playing online games, or making Internet voice calls on the 5GHz band.

### Designed for Optimal Wireless Coverage

The 5G IDU antennas have been carefully designed to ensure that you will get little or no dead space in any environment. The high-powered Amplifier sends the signal into the farthest corners of your home. Furthermore, the AX1800 Gigabit Wireless Indoor Router with SIP VOIP's multiple external antennas improve wireless reception by bringing signals to where they are most needed to achieve the best possible performance.

### File Sharing Right at Your Fingertips

The 5G IDU lets you connect a USB storage device and instantly share documents, movies, pictures, and music. You can store your music library on a USB drive and share it throughout your entire home. You can show photos on the living room TV while a family member watches a movie on their computer. You can stream media files to multiple devices without interruption, or save them to your device for offline playback. The intuitive interface lets anyone

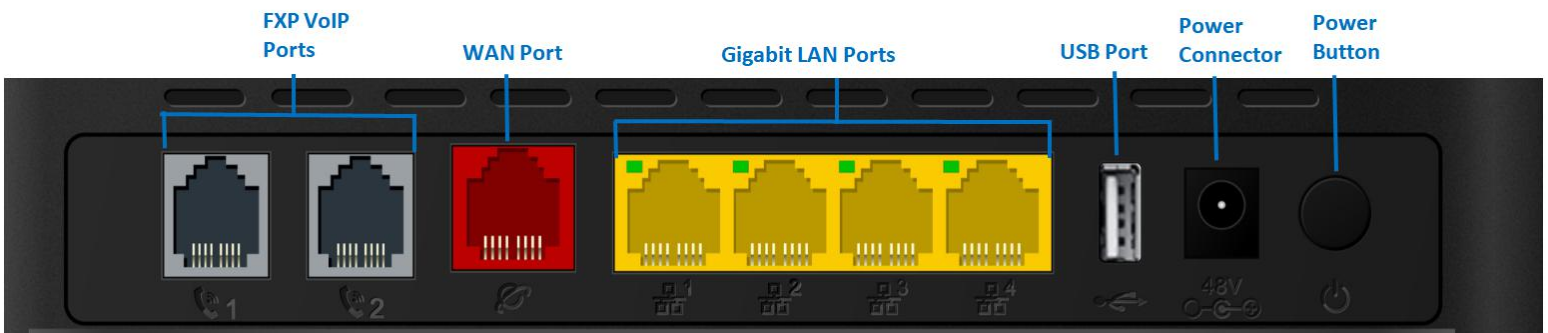
immediately connect to a variety of entertainment options stored securely on your own storage device.

### Easy to Set Up and Secure

Setting up the 5G IDU is easy with the setup wizard. Simply open the setup utility and follow a few easy steps to get your home network up and running. You can also setup a secure network with the touch of a button using Wi-Fi Protected Setup (WPS). Simply press the respective WPS buttons on each device to instantly establish a secure connection to a new device. Rest assured that your network is secure with WPA/WPA2 wireless encryption and built-in dual active firewalls (SPI and NAT), so you can shop online and do your online banking with confidence.

### Secure and Smooth Transmissions

The 5G IDU Wireless AX1800 Dual-Band Gigabit Wireless Indoor Router has built-in dual active firewalls (SPI and NAT), so you can shop online and do your online banking with confidence. It is also equipped with WPA wireless security and access control to protect your network from unauthorized access and outside threats so you can use the Internet with confidence. In addition, QoS priority queues and packet prioritization minimize traffic congestion and deliver smooth VoIP and streaming media, providing you with the best possible Internet experience.



# Wireless AX1800 Dual-Band VoIP Router

## Technical Specifications

General		
Chipset	<ul style="list-style-type: none"> <li>• BCM6755 (CPU and WIFI) +BCM53134 (4ports LAN Gigabit PHY) +GPY211B1VC (2.5G WAN PHY)</li> </ul>	
Device Interfaces	<ul style="list-style-type: none"> <li>• Four10/100/1000M Gigabit LAN Ports</li> </ul>	WLAN ON/OFF Button
	<ul style="list-style-type: none"> <li>• One10/100/1000M /2.5G Gigabit WAN Port (Support PSE)</li> </ul>	USB3.0Port
	<ul style="list-style-type: none"> <li>• Two FXS VoIP Ports</li> </ul>	WPS Button
	<ul style="list-style-type: none"> <li>• 802.11ax/ac/n/g/b Wireless LAN<sup>1</sup></li> </ul>	Reset Button
Antenna Configuration	<ul style="list-style-type: none"> <li>• Two 5dBi external 2.4G Wireless Antennas.</li> <li>• Two 5dBi external 5G Wireless Antennas.</li> </ul>	
Data Signal Rate	<ul style="list-style-type: none"> <li>• 2.4GHz</li> <li>• 573.5Mbps</li> </ul>	<ul style="list-style-type: none"> <li>• 5GHz</li> <li>• 1201Mbps</li> </ul>
Standards	<ul style="list-style-type: none"> <li>• IEEE802.11ax</li> </ul>	IEEE802.3
	<ul style="list-style-type: none"> <li>• IEEE802.11ac</li> </ul>	IEEE802.3u
	<ul style="list-style-type: none"> <li>• IEEE802.11n</li> </ul>	IEEE802.3ab
	<ul style="list-style-type: none"> <li>• IEEE802.11g</li> </ul>	IEEE802.3az
	<ul style="list-style-type: none"> <li>• IEEE802.11b</li> </ul>	IEEE802.3bz
Network Protocols	<ul style="list-style-type: none"> <li>• RFC2516PPP over Ethernet (PPPoE)</li> </ul>	
	<ul style="list-style-type: none"> <li>• RFC1662PPPinHDLC-likeFraming</li> </ul>	
	<ul style="list-style-type: none"> <li>• RFC1332PPP Internet Protocol Control Protocol</li> </ul>	
	<ul style="list-style-type: none"> <li>• Support ALG (Application Level Gateways)</li> </ul>	
	<ul style="list-style-type: none"> <li>• DHCP CLIENT</li> </ul>	
Functionality		
Security	<ul style="list-style-type: none"> <li>• WPA&amp;WPA2(Wi-Fi Protected Access)</li> </ul>	<ul style="list-style-type: none"> <li>• Wi-Fi Protected Setup(WPS)-PIN/PBC</li> </ul>
Advanced Features	<ul style="list-style-type: none"> <li>• Multi-language Web Setup Wizard</li> </ul>	<ul style="list-style-type: none"> <li>• Dual Active Firewall</li> </ul>
	<ul style="list-style-type: none"> <li>• UPnP support</li> </ul>	<ul style="list-style-type: none"> <li>• VPN pass-through /L2TP/IPSec</li> </ul>
	<ul style="list-style-type: none"> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• 802.1pQoS</li> </ul>
Routing Features	<ul style="list-style-type: none"> <li>• RFC768UserDatagramProtocol(UDP)</li> </ul>	<ul style="list-style-type: none"> <li>• Support source and destination routing</li> </ul>
	<ul style="list-style-type: none"> <li>• RFC791InternetProtocol(IP)</li> </ul>	<ul style="list-style-type: none"> <li>• Support DHCP server/client</li> </ul>
	<ul style="list-style-type: none"> <li>• RFC792InternetControlMessageProtocol(ICMP)</li> </ul>	<ul style="list-style-type: none"> <li>• Support UPnP</li> </ul>
	<ul style="list-style-type: none"> <li>• RFC793TransmissionControlProtocol(TCP)</li> </ul>	<ul style="list-style-type: none"> <li>• Support NAT,NAPT</li> </ul>
	<ul style="list-style-type: none"> <li>• RFC826AnEthernetAddressResolutionProtocol(ARP)</li> </ul>	<ul style="list-style-type: none"> <li>• Support DMZ</li> </ul>
	<ul style="list-style-type: none"> <li>• RFC862EchoProtocol</li> </ul>	<ul style="list-style-type: none"> <li>• Support IP QoS</li> </ul>
	<ul style="list-style-type: none"> <li>• Support IP routing</li> </ul>	<ul style="list-style-type: none"> <li>• Support IGMP proxy</li> </ul>
	<ul style="list-style-type: none"> <li>• Support trans parent bridging</li> </ul>	<ul style="list-style-type: none"> <li>• SupportIPv6</li> </ul>
Management Features	<ul style="list-style-type: none"> <li>• Device Configuration, Management and Update</li> </ul>	<ul style="list-style-type: none"> <li>• WAN Management Protocol(TR-069)</li> </ul>
	<ul style="list-style-type: none"> <li>• Web based GUI</li> </ul>	<ul style="list-style-type: none"> <li>• SNMPv1/v2</li> </ul>
	<ul style="list-style-type: none"> <li>• Command Line Interface via serial port, telnet, or SSH</li> </ul>	<ul style="list-style-type: none"> <li>• PSI configuration file upload and download</li> </ul>
	<ul style="list-style-type: none"> <li>• Universal Plug and Play(UPnP)Internet Gateway Device (IGDv1.0)</li> </ul>	<ul style="list-style-type: none"> <li>• Date/time update from SNTP Internet Time Server</li> </ul>
VOIP FEATURE		
DSP Feature list	<ul style="list-style-type: none"> <li>• FAX/data bypass</li> <li>&gt; 711 pass through</li> </ul>	
	<ul style="list-style-type: none"> <li>• T38 FAX Relay</li> <li>&gt; Supports T.38 versions (06/98 to 03/02), V34 included.</li> <li>&gt;V.152 FAX</li> <li>&gt;T.38 over UDPTL - ASN.1 encoding/decoding of UDPTL packets (Packet loss, Recovery, Redundancy)</li> </ul>	
	<ul style="list-style-type: none"> <li>• RTP/RTCP transfer</li> <li>&gt; RTP/AVP - RFC3551 (formerly 1890)</li> <li>&gt; RTP/RTCP - RFC3550 (formerly 1889)</li> </ul>	
	<ul style="list-style-type: none"> <li>• Jitter Buffer</li> <li>&gt;Static/dynamic, up to 200m</li> </ul>	
	<ul style="list-style-type: none"> <li>• Caller ID generation</li> <li>&gt; Support type 1 and type 2</li> </ul>	
	<ul style="list-style-type: none"> <li>• Codec support</li> <li>&gt;G.711 A-Law</li> <li>&gt;G.711 U-Law</li> </ul>	

	<ul style="list-style-type: none"> <li>&gt;G.722</li> <li>&gt;G.729 Annex A, B</li> <li>• Digital gain configuration <ul style="list-style-type: none"> <li>&gt;Range:+/- 20db step by 0.5db</li> <li>&gt; The voice's volume controlled by the Host per channel</li> </ul> </li> <li>&gt; On the fly modification <ul style="list-style-type: none"> <li>• Packet time length <ul style="list-style-type: none"> <li>&gt;10ms, 20ms, 30ms, 40ms</li> </ul> </li> <li>• Packet Loss Concealment <ul style="list-style-type: none"> <li>&gt;Packet Loss Concealment - ITU-T G.711 Appendix I</li> </ul> </li> <li>• G729 VAD&amp;CNG</li> <li>• G.711 VAD&amp;CNG <ul style="list-style-type: none"> <li>&gt;Voice Activity Detector, Comfort Noise Generation - ITU-T G.711 Appendix II</li> <li>&gt; CNG RFC 3389</li> </ul> </li> <li>• DTMF generation &amp; detection <ul style="list-style-type: none"> <li>&gt;ITU-T Q.23 and Q.24</li> <li>&gt;DTMF tones generation and detection compliant with the TIA 464B standard.</li> </ul> </li> <li>• Echo Canceller <ul style="list-style-type: none"> <li>&gt; Echo canceller automatically enabled when both volume &lt;=36dBm</li> <li>&gt;Echo tail length (Up to 32ms)</li> <li>&gt;Echo canceller disabled by 2100Hz tone with phase reversal.</li> <li>&gt;Echo canceller must remove echo with ERL=0-3dB</li> <li>&gt;Line EC, G.168-2004 compliant</li> </ul> </li> <li>• Pulse Dial Detection</li> <li>• 3-Way conference</li> <li>• Tone generation <ul style="list-style-type: none"> <li>&gt;Call progress tones generation</li> <li>&gt;Generate howler tones</li> <li>&gt;Quad tone generation</li> </ul> </li> </ul> </li></ul>
SIP/Call Control Feature Lis	<ul style="list-style-type: none"> <li>• SIP Protocol <ul style="list-style-type: none"> <li>&gt;RFC 2617, HTTP Authentication: Basic and Digest Access Authentication.</li> <li>&gt;RFC3428- Session Initiation Protocol (SIP) Extension for Instant Messaging</li> <li>&gt;RFC2976- The SIP INFO Method</li> <li>&gt;RFC3842-A Message Summary and Message Waiting Indication Event Package for the Session Initiation Protocol (SIP)</li> <li>&gt;RFC 2976, The SIP INFO Method</li> <li>&gt; RFC3310-Hypertext Transfer Protocol (HTTP) Digest Authentication Using Authentication and Key Agreement (AKA)</li> <li>&gt; RFC4169-Hypertext Transfer Protocol (HTTP) Digest Authentication Using Authentication and Key Agreement (AKA) Version-2</li> <li>&gt; RFC4566 , SDP: Session Description Protocol(new)</li> <li>&gt;RFC 3264, An Offer -Answer Model with the SDP</li> <li>&gt; RFC 3265 - SIP- Specific Event Notification</li> <li>&gt; RFC 3311, The SIP UPDATE Method</li> <li>&gt; RFC 3842, - A Message Waiting Indication Event Package for the SIP</li> <li>&gt; RFC 3960, Early Media and Ringing Tone Generation in the SIP</li> <li>&gt; RFC 3325, Private Extensions to the SIP for Asserted Identity within Trusted Networks (Partial )</li> <li>&gt; RFC 3261, SIP: Session Initiation Protocol version 2</li> <li>&gt; RFC 2327, SDP: Session Description Protocol</li> <li>&gt; RFC 3326, The Reason Header Field for SIP (Partial )</li> <li>&gt; RFC 3515, The SIP REFER Method</li> <li>&gt; RFC 3262, Reliability of Provisional Responses in the SIP</li> <li>&gt; RFC 3263, SIP: Locating SIP Servers</li> <li>&gt; RFC 3581, - An Extension to the SIP for Symmetric Response Routing</li> <li>&gt; RFC 4028, Session Timers in the SIP</li> <li>&gt; RFC 4566 - SDP Session Description Protocol</li> <li>&gt; RFC4488- Suppression of Session Initiation Protocol (SIP) REFER Method Implicit Subscription</li> <li>&gt; RFC3966 -The tel URI for Telephone Numbers</li> <li>&gt; RFC4028-Session Timers in the Session Initiation Protocol (SIP)</li> <li>&gt; RFC3093- Session Initiation Protocol (SIP) Extension for Event State Publication</li> <li>&gt; RFC3605- Real Time Control Protocol (RTCP) attribute inSession Description Protocol (SDP)</li> <li>&gt; RFC3608, Session Initiation Protocol (SIP) Extension Header Field for Service Route Discovery During Registration</li> <li>&gt; RFC3327 Session Initiation Protocol (SIP) Extension Header Field for Registering Non-Adjacent Contacts</li> <li>&gt; RFC3891 The Session Initiation Protocol (SIP) "Replaces" Header</li> <li>&gt; RFC3892 The Session Initiation Protocol (SIP) Referred-By Mechanism</li> <li>&gt; RFC3420 Internet Media Type message/sipfrag</li> <li>&gt; RFC2046- Multipurpose Internet Mail Extensions (MIME) Part Two:Media Types</li> <li>&gt; RFC5621- Message Body Handling in the Session Initiation Protocol (SIP)</li> <li>&gt; RFC4321-Problems Identified Associated with the Session Initiation Protocol's (SIP) Non-INVITE Transaction</li> <li>&gt; RFC5057-Multiple Dialog Usages in the Session Initiation Protocol</li> <li>&gt; RFC5621-Message Body Handling in the Session Initiation Protocol (SIP)</li> <li>&gt; RFC2833 - RTP Payload for DTMF Digits, Telephony Tones and Telephony Signals</li> <li>&gt; IETF RFC 3310 HTTP Digest Authentication using Authentication and Key Agreement (AKA) when talking with the registration server.</li> <li>&gt; IETF RFC 3311 The Session Initiation Protocol (SIP)UPDATE Method.</li> <li>&gt; IETF RFC 2198 The redundancy function.RTP Payload for Redundant Audio Data</li> <li>&gt; IETF RFC 3555 MIME Type Registration of RTP Payload Formats</li> <li>&gt; IETF RFC 3388 Grouping of Media Lines in the Session Description Protocol(SDP)</li> </ul> </li> <li>• WMI (Support SIP Stack)</li> <li>• Call Feature <ul style="list-style-type: none"> <li>&gt; Busy Call Forward</li> <li>&gt; Attended Call Transfer</li> <li>&gt; Do not Disturb</li> <li>&gt; Call waiting</li> <li>&gt; 3-Way conference</li> <li>&gt; No Reply Call Forward</li> </ul> </li> </ul>

- |  |   |
|--|---|
|  | <ul style="list-style-type: none"><li>&gt; Blind Call Transfer</li><li>&gt; Unconditional Call Forward</li><li>&gt; Hotline</li><li>&gt; A digit map of at least 256 characters.</li><li>&gt; Draft-rosenberg-midcom-turn-08, Traversal Using Relay NAT (TURN).</li></ul> |
|--|---|

# Wireless AX1800 Dual-Band VoIP Router

Physical	
Dimensions	• 235x167x56mm
Weight	• 475.7grams(1.05pounds)
Power	• Input:48V/1A DC adaptor • Output: 48 V / 0.5 A PSE
Temperature	• Operating:0 to45 °C(32to113 °F) • Storage: -20 to 70 °C (-4 to 158 °F)
Humidity	• 10%to95%non-condensing
Certifications	• CE • FCC
Order Information	
<i>Part Number</i>	<i>Description</i>
5G IDU	Wireless AX1800 Dual-Band VoIP Router