

BiPAC 6404V(G)P

VoIP (802.11g) Broadband Firewall Router

with two VoIP FXS ports and PSTN fixed-line support

True Cost Savings with Billion's BiPAC 6404V(G)P router! This VoIP (802.11g) Firewall Router packs many powerful features into a single box to allow home and SOHO users to enjoy affordable VoIP calls, while having the mobility and high-speed Internet access. The world-standard Gateway feature known as "Least Cost Routing" enables users to choose the best VoIP call rates provided by various Internet Telephony Service Providers (ITSPs). Two integrated FXS ports provide dual lines for making VoIP calls. An additional FXO port enables you to make calls via PSTN Fixed-line while providing even faster Internet access sharing. Unparalleled firewall security features such as SPI, DoS attack prevention, and URL Content Filtering protect your Internet access against attacks by hackers. In addition, the Quality of Service feature ensures a smooth net connection for inbound and outbound data with minimal traffic congestion.

- Broadband sharing with fast Ethernet switch
- Supports VoIP - Voice over IP (SIP compliant)
- Two FXS ports for connecting to regular telephones
- One FXO port for voice calls via PSTN Fixed-line
- VoIP gateway features offer Least Cost Routing support
- 802.11g Wireless AP with WPA-PSK/ WPA2-PSK Support (BiPAC 6404VGP)
- Quality of Service for Traffic Prioritization and Bandwidth Management
- Share high speed Internet Access
- SOHO Firewall Security with DoS Prevention and SPI
- Universal Plug-and-Play (UPnP) Compliant
- Ease of Use with the Quick Installation Wizard
- Supports IPTV Application*
- Ideal for Home and SOHO Users

**▲ BiPAC 6404VGP****▲ BiPAC 6404VP**

Benefits

Truly Cost Saving

Making toll-quality VoIP calls is very simple: simply connect the router to your existing telephone(s). The BiPAC 6404V(G)P complies with the most popular VoIP industrial standards and SIP protocol, to ensure interoperability with SIP devices and major VoIP Gateways. The Gateway feature "Least Cost Routing" offers a choice of the best rates provided by ITSPs. An integrated RJ-11 FXO port allows inbound and outbound calls to be transmitted through PSTN Fixed-line so that users can even receive phone calls via PSTN while they are enjoying VoIP service. In addition, outgoing calls will be automatically redirected to PSTN during power outages or when VoIP service is not available.

Smooth and Responsive Net Connection

The Quality of Service (QoS) feature helps users manage bandwidth and effectively prioritize data traffic. This feature offers full control of data traffic of every kind. QoS ensures that latency-sensitive, bandwidth-consuming applications like P2P sharing programs, VoIP calls, gaming packets and customer information pass through the router at lightning speed, even when the router is under a heavy load. You can control the speed of inbound and outbound data passing through the router to ensure that users do not saturate your bandwidth with their browsing activities.

Robust Firewall Security

Along with the built-in NAT natural firewall feature, the router's advanced anti-hacker pattern-filtering protection feature automatically detects and blocks Denial of Service (DoS) attacks. Built with Stateful Packet Inspection (SPI), the router enables users to determine whether or not a given data packet is allowed to pass through the firewall to the private LAN.

Wireless Mobility (BiPAC 6404VGP)

With an integrated 802.11g Wireless Access Point, the router offers quick and easy access and mobility to the users of wired networks, wireless networks, and broadband connections (ADSL). In addition to supporting the 54 Mbps 802.11g data rate, it is also backward compatible with existing 802.11b equipment. The Wireless Protected Access (WPA-PSK/WPA2-PSK) and Wireless Encryption Protocol (WEP) features enhance the level of data protection and access control via a Wireless LAN. If your network requires wider coverage, the built-in Wireless Distribution System (WDS) repeater function allows you to expand the wireless network without using any wires at all.



Features & Specifications

Network Protocols and Features

- PPPoE, DHCP client and fixed IP connection to ISP
- NAT, static routing and RIP-1/2
- Universal Plug and Play (UPnP) Compliant
- Dynamic Domain Name System (DDNS)
- Virtual Server and DMZ
- SNTP, DNS relay and IGMP proxy
- POP3 (email account checking)
- IGMP Snooping for video service

Firewall

- Built-in NAT firewall
- Stateful Packet Inspection (SPI)
- Prevents DoS attacks including IP Spoofing, Land Attack, Smurf Attack, Ping of Death, TCP SYN Flooding, etc.
- Packet Filtering - port, source IP address, destination IP address, MAC address
- URL Content Filtering - string or domain name detection in URL strings

VoIP

- Two RJ-11 FXS ports for connecting to regular telephones
- One RJ-11 FXO port for PSTN Fixed-line
- Compliant with SIP standard (RFC3261)
- Supports G.711 A/μ law, and G.729 Audio Codec standards
- Supports Telephony Features: call waiting, silence suppression, voice activity detection (VAD), comfort noise generation (CNG), G.168 echo cancellation, and caller ID (Bell 202,V23)
- Voice over data, QoS control to ensure higher voice quality
- Automatic fallback to PSTN Fixed-line when power outages occur or VoIP service is not available.
- VoIP gateway features offer Least Cost Routing support

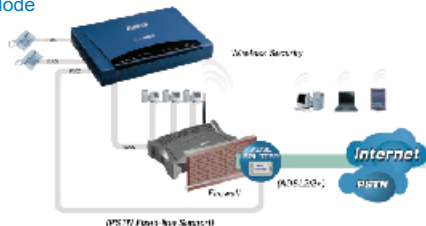
Quality of Service Control

- Supports the DiffServ approach
- Traffic prioritization and bandwidth management based-on IP protocol, port number and address

IPTV Application*

- IGMP Snooping
- Virtual LAN (VLAN)
- Quality of Service (QoS)

▲ ATA Mode



▲ Broadband Router Mode



▲ 6404VP

Wireless 802.11g (BiPAC 6404VGP)

- Compliant with IEEE 802.11g and 802.11b standards
- 2.4 GHz - 2.484G Hz frequency range
- Up to 54 Mbps wireless operation rate
- 64/128 bits WEP supported for encryption
- Wireless security with WPA-PSK/WPA2-PSK support
- WDS repeater function support

Management

- Quick Installation Wizard
- Web-based GUI for remote and local management
- Firmware upgrade and configuration data upload and download via Web-based GUI
- Embedded Telnet server for remote and local management
- Available Syslog monitoring
- SNMP v3, MIB-I and MIB-II support
- Support DHCP server/client/relay

Hardware Specification

Physical Interface

- WLAN: Antenna (BiPAC 6404VGP)
- WAN: RJ-45 Ethernet port for connecting to ADSL/Cable device
- Telephone: 2-port FXS
1-port FXO (For PSTN Fixed-line support)
- LAN: 3-port 10/100M auto-crossover (MDI/MDI-X) Switch
- Console: the Ethernet Port # 3 can be also connected to console
- Factory default reset button
- Power jack
- Power switch

Physical Specification

- Dimensions: 8.27" x 5.83" x 1.42"
(210mm x 148mm x 36mm)

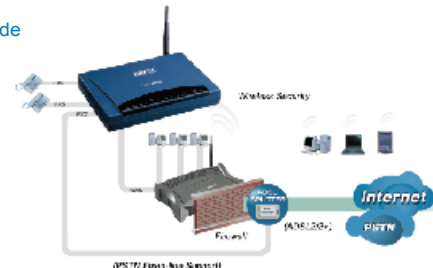
Power Requirement

- Input: 12V DC, 1A

Operating Environment

- Operating temperature: 0 ~ 40°C
- Storage temperature: -20 ~ 70°C
- Humidity: 20 ~ 95% non-condensing

▲ ATA Mode



▲ Broadband Router Mode



▲ 6404VGP

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*Notes:

1. IPTV application may require subscribing to IPTV services from a Telco/ISP.
2. Specifications in this datasheet are subject to change without prior notice.