

BiPAC 7404V(G)P



VoIP/(802.11g) ADSL2+ Firewall Router with PSTN Fixed-line support

Truly Cost-Saving with Billion's BiPAC 7404V(G)P series router! Billion's BiPAC 7404V(G)P series router is a truly all-in-one compact VoIP router with powerful functionalities designed for home and SOHO users to enjoy economical VoIP calls concurrently with the versatile, high-speed as well as secured Internet access. The world-leading Gateway feature "Least Cost Routing" enables users to choose the most economical rate of VoIP calls provided by different Internet Telephony Service Providers (ITSP). This device integrates the two FXS ports offering dual lines for making VoIP calls. The additional FXO port enables you to make calls through PSTN Fixed-line while sharing a high-speed Internet connection. The Internet access is also safely protected from attack of hackers through unparalleled Firewall security features such as SPI, DoS attack prevention, and URL Content Filtering. The Quality of Service feature ensures a smooth net connection for inbound and outbound data with minimal traffic congestion.

- Voice over IP compliant with SIP standard
- Two FXS ports for connecting to regular telephones
- One FXO port for voice calls via PSTN Fixed-line
- Gateway - Least Cost Routing support (for retail package only)
- High speed Internet Access with ADSL2/2+, backward compatible with ADSL
- 802.11g Wireless AP with WPA-PSK/ WPA2-PSK Support (BiPAC 7404VGP)
- SOHO Firewall Security with DoS Prevention and SPI
- Quality of Service for Traffic Prioritization and Bandwidth Management
- Ease of Use with Quick Installation Wizard and Auto-scan ADSL Settings
- Supports IPTV Application*
- Ideal for Home and SOHO Users



▲ BiPAC 7404VGP



▲ BiPAC 7404VP

Benefits

Truly Cost Saving

Making VoIP calls with toll-quality is extremely simple; just connect the router to your existing telephone sets. The BiPAC 7404V(G)P complies with the most popularly adopted VoIP industrial standard, SIP protocol, to ensure the interoperability with SIP devices and major VoIP Gateways. The Gateway feature "Least Cost Routing" offers the choice of the most economical rate provided by different ITSP. One RJ-11 FXO port is integrated to transmit inbound and outbound calls through PSTN Fixed-line so that users may still be able to receive phone calls through PSTN while enjoying VoIP service at the same time. In addition, outgoing calls will be automatically redirected to PSTN when the Internet or VoIP service is not available. The router also supports a wider range of telephony features, such as call waiting, silence suppression, line echo cancellation, caller ID, etc.

Express Internet Access

This router complies with worldwide ADSL standards. It supports downstream rates of up to 12/24 Mbps with ADSL2/2+, 8 Mbps with ADSL, and upstream rates of up to 1 Mbps. With this technology, users enjoy not only high-speed ADSL service but also broadband multimedia applications such as interactive gaming, video streaming and real-time audio much more quickly and easily than ever. In particular, by doubling the upstream data rate, the Annex M standard included in the BiPAC 7404V(G)PM model supports the latest ADSL2/2+ for higher upload speeds.

Wireless Mobility (BiPAC 7404VGP)

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.

Smooth and Responsive Net Connection

The Quality of Service (QoS) feature helps users to manage the bandwidth and prioritize data transfer effectively. It gives one full control over any type of data transfer, ensuring latency-sensitivity and bandwidth-consuming applications such as P2P sharing program, VoIP calls, gaming packets or customer information, can move through the router at instantaneous speed, even when under heavy tasking. The speed of inbound and outbound data passing through the router can be controlled to ensure that users do not saturate the bandwidth with their browsing activities.



Features & Specifications

ADSL Compliance

- Compliant with ADSL Standard
 - Full-rate ANSI T1.413 Issue 2
 - G.dmt (ITU G.992.1)
 - G.hs (ITU G.994.1)
 - ADSL over ISDN/U-R2
- Compliant with ADSL2 Standard
 - G.dmt.bis (ITU G.992.3)
 - ADSL2 Annex M (ITU G.992.3 Annex M) (Available for BiPAC 7404V(G)PM model only)
- Compliant with ADSL2+ Standard
 - G.dmt.bisplus (ITU G.992.5)
 - ADSL2+ Annex M (ITU G.992.5 Annex M) (Available for BiPAC 7404V(G)PM model only)

Network Protocols and Features

- 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)
- Prevent 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 string

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 line echo cancellation, caller ID (Bell 202,V23)
- Voice over data, QoS control to ensure higher voice quality
- Automatic fallback to PSTN Fixed-line when the Internet or VoIP service is not available.
- Gateway - Least Cost Routing support (for retail package only)

Wireless 802.11g (BiPAC 7404VGP)

- 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

IPTV Application*

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

Quality of Service Control

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

ATM and PPP Protocols

- ATM Adaptation Layer Type 5 (AAL5)
- Multiple Protocol over AAL5 (RFC 2684, formerly RFC 1483)
- Bridged or routed Ethernet encapsulation
- VC and LLC based multiplexing
- PPP over Ethernet (PPPoE)
- PPP over ATM (RFC 2364)
- Classical IP over ATM (RFC 1577)
- MAC Encapsulated Routing (RFC 1483 MER)
- OAM F4/F5

Models & Standards Support

- BiPAC 7404V(G)PA: Annex A
- BiPAC 7404V(G)PM: Annex A & Annex M
- BiPAC 7404V(G)PB: Annex B & U-R2
- Annex A and Annex M: ADSL over POTS
- Annex B and Annex U-R2: ADSL over ISDN

Management

- Quick Installation Wizard and Auto-scan ADSL settings
- 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
- Supports DHCP server/client/relay

Hardware Specification

Physical Interface

- WLAN: detachable antenna (BiPAC 7404VGP)
- WAN: ADSL port
- Telephone: 2-port FXS
 - 1-port FXO (For PSTN Fixed-line support)
- LAN: 4-port 10/100M auto-crossover (MDI/MDI-X) Switch
- Console: the Ethernet Port # 4 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, 1.2A

Operating Environment

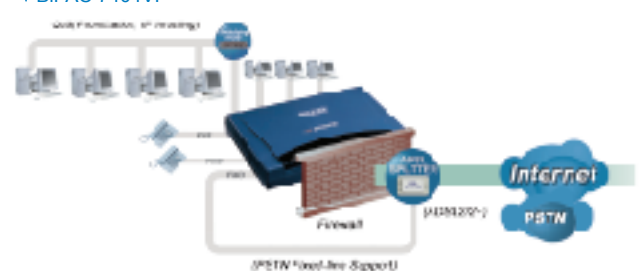
- Operating temperature: 0 ~ 40°C
- Storage temperature: -20 ~ 70°C
- Humidity: 20 ~ 95% non-condensing

Application Diagram

▼ BiPAC 7404VGP



▼ BiPAC 7404VP



*Note:

1. The router may require firmware modification for certain ADSL2+ / Annex M DSLAMs.
2. IPTV application may require subscribing to IPTV services from a Telco/ISP.
3. Specifications in this datasheet are subject to change without prior notice.

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