

BiPAC 7401V(G)P



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

Billion's BiPAC 7401V(G)P series router is a truly all-in-one VoIP router with powerful features designed for home and SOHO users. With the BiPAC 7401V(G)P you can enjoy affordable VoIP calls and mobile, high-speed, secure Internet access at the same time. This router series with integrated a single FXS port allows you to make VoIP calls simply by connecting the device to your existing telephone set. The additional FXO port enables you to make calls through PSTN Fixed-line while sharing a high-speed Internet connection. An abundance of integrated firewall security features such as SPI, DoS attack prevention, and URL Content Filtering provide users unparalleled protection from hackers. 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
- One FXS ports for connecting to regular telephones
- One FXO port for voice calls via PSTN fixed-line
- High speed Internet Access with ADSL2/2+, backward compatible with ADSL
- 802.11g Wireless AP with WPA-PSK/WPA2-PSK Support (BiPAC 7401VGP)
- SOHO Firewall Security with DoS Prevention and SPI
- Traffic Prioritization and Bandwidth Management for QoS Control
- Ease of Use with Quick Installation Wizard and Auto-scan ADSL Settings
- Supports IPTV Application*
- Ideal for Home and SOHO Users



▲ BiPAC 7401VGP



▲ BiPAC 7401VP

Benefits

Economical Phone Calls

The BiPAC 7401V(G)P series complies with the most popular VoIP industrial standard, SIP protocol, to ensure interoperability with SIP devices and major VoIP Gateways. By connecting the router to an existing telephone line, users can make affordable yet toll-quality VoIP calls via ADSL Internet connections. The router integrates one RJ-11 FXO port for inbound and outbound calls transmitted through PSTN Fixed-line so that users can even receive phone calls via PSTN at the same time as they are enjoying VoIP call service. In addition, outgoing calls will be automatically redirected to PSTN when VoIP service or Internet access 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 7401V(G)PM model supports the latest ADSL2/2+ for higher upload speeds.

Wireless Mobility (BiPAC 7401VGP)

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

Quality of Service (QoS) gives you full control over outgoing data traffic. Priority can be assigned by the router to ensure that important data like gaming packets, customer information, or management information passes through the router at lightning speed, even under a heavy load. You can also control the speed of different types of outgoing data passing through the router to ensure that users do not saturate your 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 7401V(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 7401V(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

- One 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.

Wireless 802.11g (BiPAC 7401VGP)

- 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)

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 7401V(G)PA: Annex A
- BiPAC 7401V(G)PM: Annex A & Annex M
- BiPAC 7401V(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 7401VGP)
- WAN: ADSL port
- Telephone: 1-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: 7.09" x 4.72" x 1.57"
(180mm x 120mm x 40mm)

Power Requirement

- Input: 12V DC, 1A

Operating Environment

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

Quality of Service Control

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

Application Diagram

▼ BiPAC 7401VGP



▼ BiPAC 7401VP



*Note:

1. The router may require firmware modification for certain ADSL2/2+ 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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