

BiPAC 7401V(G)P



BILLION™

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

Billion's BiPAC 7401V(G)P series is a compact package of VoIP router series with powerful functionalities ideally designed for home and SOHO users to enjoy economical VoIP calls while having the mobility and high-speed and safe Internet access. This router series integrated with a single FXS port allows you to make VoIP calls simply by connecting the device to your regular telephone set. The additional FXO port enables you to make calls through PSTN Fixed-line while sharing a high-speed Internet access even faster. Rich Firewall security features such as SPI, DoS attack prevention, and URL Content Filtering are integrated to provide users unparalleled protection from hackers' attack. The Quality of Service feature ensures a smooth net connection for inbound and outbound data with minimum 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 to 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
- Support IPTV Application*
- Ideal for Home and SOHO Users



▲ BiPAC 7401VGP



▲ BiPAC 7401VP

Benefits

Economical Phone Calls

The BiPAC 7401V(G)P complies with the most popular VoIP industrial standard, SIP protocol, to ensure the interoperability with SIP devices and major VoIP Gateways. By connecting the router with your existing telephone set, users can make cost-saving yet toll-quality VoIP calls via ADSL Internet connection. 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 from PSTN while enjoying VoIP service at the same time. In addition, outgoing calls will be redirected to PSTN automatically when the Internet or VoIP service is not available. The router also supports telephony features, such as call waiting, silence suppression, line echo cancellation, caller ID and so on.

Express Internet Access

The router complies with ADSL worldwide standards. It supports downstream rate up to 12/24 Mbps with ADSL2/2+, 8Mbps with ADSL and upstream rate up to 1 Mbps. With this technology, users enjoy not only high-speed ADSL services but also broadband multimedia applications such as interactive gaming, video streaming and real-time audio much easier and faster than ever. Particularly, Annex M standard combined in the model of BiPAC 7401V(G)PM supports the latest ADSL2/2+ for higher upload speeds by doubling the upstream data rate.

Smooth and Responsive Net Connection

The Quality of Service (QoS) feature helps users manage the bandwidth and prioritize the traffic of data effectively. It gives you full control over the traffic of any type of data. It ensures latency-sensitive and bandwidth-consuming applications like P2P sharing program, VoIP call, gaming packets or customer information can move through the router at lightning speed, even under heavy load. You can control the speed for inbound and outbound data passed through the router to ensure users do not saturate the bandwidth and browsing activities.

Wireless Mobility (BiPAC 7401VGP)

With integrated 802.11g Wireless Access Point in the router, the device offers a quick yet easy access and mobility to the users among wired network, wireless network, broadband connection (ADSL). In addition to 54 Mbps 802.11g data rate, it is also backward compatible with existing 802.11b equipments. The Wireless Protected Access (WPA-PSK/WPA2-PSK) and Wireless Encryption Protocol (WEP) features enhance the security level of data protection and access control via 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 wires at all.



Powering communications
with Security

ADSL Modem / Router

Wireless ADSL Router

Home Networking
ADSL Router

Broadband Router

Security Router

VoIP ADSL Modem/Router

SHDSL Bridge / Router

iBusiness
Security Appliance

Feature & Specification

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.

Quality of Service Control

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

Wireless 802.11g (BiPAC 7401VGP)

- Compliant with IEEE 802.11g and 802.11b standards
- 2.4 GHz – 2.484 GHz 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)

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

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

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
- Support 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: 12VDC, 1.2A

Operating Environment

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

Application Diagram*

▼ BiPAC 7401VP



▼ BiPAC 7401VGP



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*Note:

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

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