ADSL Modem / Router

Wireless ADSL Router

Powerline
ADSL Router and Adapter

Broadband Router

Security Router

VoIP ADSL Modem/Router

SHDSL Bridge / Router

iBusiness
Security Appliance
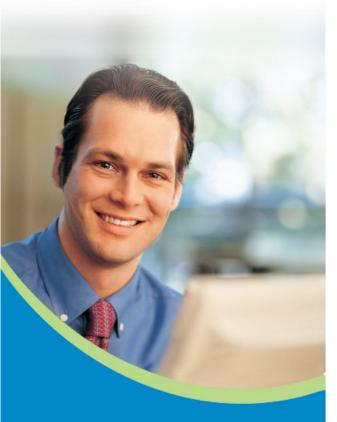
BILLION ™

BiPAC 7402G

802.11g ADSL2+ VPN Firewall Router

Billion's BiPAC 7402G - truly secure, cable-free, express-speed to enhance the productivity. BiPAC 7402G is an advanced device designed for office users. It supports the latest ADSL2/2+ technology enabling high-speed data rate of up to 24Mbps. Its powerful QoS feature for traffic priority and bandwidth management, and security features including multiple VPN tunnels with 3DES make the device a perfect mate to the office user or for anyone who has the compelling needs to transmit sensitive data more securely. With integrated 54Mbps 802.11g Access Point in this device, the router brings up the productivity and mobility to office users.

- High speed Internet access with ADSL2/2+; backward compatible to ADSL
- 802.11g Wireless AP with WPA Support
- QoS Control for Traffic prioritization and Bandwidth Management
- Secured Virtual Private Network (VPN) with powerful 3DES
- SOHO Firewall Security with DoS Prevention and SPI
- Universal Plug and Play (UPnP) compliance
- Parental Control with URL Content Filtering and Packet Filtering
- Dynamic Domain Name System (DDNS)
- Available Syslog monitoring
- Ease of Use with Quick Installation Wizard and Auto-scan ADSL settings
- Support IPTV Application*
- Ideal for Office Users

Benefits

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. 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, the Annex M model also supports the latest ADSL2/2+ Annex M technology for higher upload speeds by doubling the upstream data rate. With Enhanced Upstream operation, the router with Annex M model is an ideal solution for user's communications needs.

Fast and Responsive Net Connection
Quality of Service (QoS) gives users the full control over which type of outgoing data traffic given priority by the router, ensuring important data like gaming packets, customer information, or management information move through the router at lightning speed, even under heavy load. The transmission speed can be throttled both inbound and outbound data passed through the router to ensure P2P users not to saturate uploading bandwidth, or office browsing not bring client web serving to a halt. In addition, the priority type of upload data can be changed in order to let the router sort out the actual speeds.

Secured Data Communication
The router supports embedded Virtual Private Network (VPN) protocols for establishing private encrypted tunnels over the public Internet to ensure transmission security between two or more sites. With built-in DES/3DES accelerator, the router enhances the IPSec VPN performance significantly.

Mobility and Protection
With integrated 802.11g Wireless Access Point in the router, the device offers a quick and easy access among wired network, wireless network and broadband connection (ADSL) with single device simplicity, and as a result, mobility to the users. In addition to 54 Mbps 802.11g data rate, it also interoperates backward with existing 802.11b equipment. The Wireless Protected Access (WPA) and Wireless Encryption Protocol (WEP) supported features enhance the security level of data protection and access control via Wireless LAN.

Robust Firewall Security
Along with the built-in NAT natural firewall feature, the router also provides advanced hacker pattern-filtering protection. It can automatically detect and block Denial of Service (DoS) attacks. Built with Stateful Packet Inspection (SPI), the router enables users to determine whether or not a data packet is allowed to pass through the firewall to the private LAN.

Powering communications
with **Security**

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 7402GM 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 7402GM 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, 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

Quality of Service Control
- Support 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

Wireless 802.11g
- 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
- WPA support

Virtual Private Network (VPN)
- 16 IPSec VPN Tunnels
  8 L2TP VPN Tunnels (Dial-in: 4, Dial-out: 4)
  8 PPTP VPN Tunnels (Dial-in: 4, Dial-out: 4)
- Embedded IPSec & PPTP client/server
- IKE key management
- DES, 3DES and AES encryption for IPSec
- Embedded powerful 3DES accelerator
- MPPE Encryption for PPTP
- L2TP within IPSec
- L2TP/PPTP/IPSec pass-through

Management
- Quick Installation Wizard and Auto-scan ADSL settings
- Web-based GUI for remote and local management
- Firmware upgraded 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

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

Hardware Specification
Physical Interface
- WLAN: one detachable antenna
- WAN: ADSL port
- LAN: 4-port 10/100M auto-crossover (MDI/MDI-X) Switch
- Console: PS2
- 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 ℃
- Storage temperature: -20 ~ 70 ℃
- Humidity: 20 ~ 95% non-condensing

Models & Standards Support
- BiPAC 7402GA: Annex A
- BiPAC 7402GM: Annex A & AnnexM
- BiPAC 7402GB: Annex B &U-R2
- Annex A and Annex M: ADSL over POTS
- Annex B and Annex U-R2: ADSL over ISDN

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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.