

**BiPAC 8500/8520**



## 2.3/4.6 Mbps SHDSL VPN Firewall Bridge/Router

The BiPAC 8500/8520 series is ideally designed for small businesses to use as a substitute for local leased lines. As a substitute of a local leased line, the device offers a perfect solution of symmetric transmission for SOHO and SME users to enjoy high-speed SHDSL broadband services, as well as bandwidth-consuming applications such as video conferencing with more ease and speed than ever before. The Quality of Service feature ensures a smooth net connection for inbound and outbound data with minimal traffic congestion. The router also supports IPSec VPN for users to create a secure data communications environment between two or more sites. An abundance of integrated firewall security features such as SPI, DoS attack prevention, and URL Content Filtering provide users unparalleled protection from hackers.



Product Name	Symmetric Data Rate
BiPAC 8500	2.3 Mbps (2-wire SHDSL)
BiPAC 8520	4.6Mbps (4-wire SHDSL)

- Supports Symmetric Data Rate of up to 2.3 Mbps / 4.6 Mbps.
- High-speed Back-to-Back Connectivity for Bandwidth-consuming Applications
- High-speed Internet Access with SHDSL
- SOHO Firewall Security with DoS Prevention and SPI
- Parental Control with URL Blocking and Packet Filtering
- DiffServ Quality of Service Control
- Secured Virtual Private Network (VPN)
- Dynamic Domain Name System (DDNS)
- Available Syslog monitoring
- Integrated 4-port Ethernet Switch
- Ideal for Office Users

### Benefits

#### High-speed Internet Access with 2/4-wire SHDSL

The BiPAC 8500 complies with the standard of SHDSL for worldwide deployment and supports a symmetric data rate of up to 2.3 Mbps. The BiPAC 8520 supports a symmetric data rate of up to 4.6 Mbps. With the SHDSL technology, the BiPAC 8500/8520 series allows office users to enjoy high-speed symmetric bandwidth and multimedia applications such as FTP sharing, video conferencing and real-time audio with much ease and speed than ever before.

#### High-speed Back-to-Back Connectivity

The BiPAC 8500/8520 series can be configured as RT/COT (client/server) mode for back-to-back applications. With the symmetric transmission auto-detect speed of up to 2.3 Mbps / 4.6 Mbps, the router can offer a cost-effective way for bandwidth-consuming applications, such as distance learning and video conferencing.

#### 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 the traffic of any type of data, ensuring latency-sensitivity and bandwidth-consuming applications such as video conferencing, customer information or FTP sharing, can move through the router at instantaneous speed, even when under heavy tasking. The speed for inbound and outbound data passed through the router can be controlled to ensure that users do not saturate the bandwidth with their browsing activities.

#### SOHO Firewall Security with DoS Prevention and SPI

Besides having a built-in NAT natural firewall feature, the BiPAC 8500/8520 also provides an advanced hacker pattern-filtering protection that can automatically detect and block Denial of Service (DoS) attacks, such as IP Spoofing, Ping of Death, etc. The router is also built with Stateful Packet Inspection (SPI) to determine whether a data packet should be allowed to pass through the firewall to the private LAN.

#### Virtual Private Network

The router supports embedded Virtual Private Network (VPN) protocols for users to establish private encrypted tunnels over the public Internet.



# Features & Specifications

## SHDSL Compliance

- Compliant with ITU-T G.991.2 Standard
- Symmetric data rate of up to 2.3 Mbps / 4.6 Mbps

## 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

## 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

## Hardware Specification

### Physical Interface

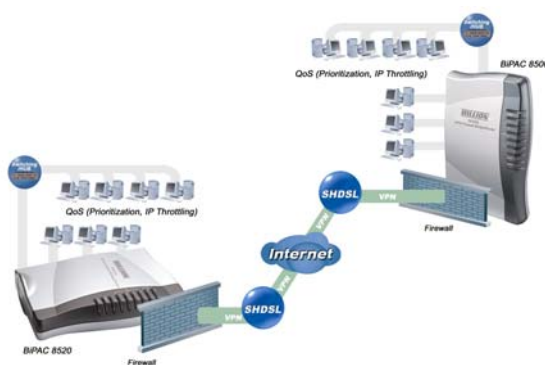
- WAN: SHDSL port
- Console: PS2
- LAN: 4-port 10/100M auto-crossover (MDI/MDI-X) Switch
- Factory default reset button
- Power jack
- Power switch

### Physical Specification

- Dimensions: 7.32" x 5.04" x 1.81"  
(186mm x 128mm x 46mm)

### Power Requirement

- Input: 12V DC, 1A



## 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)

## Virtual Private Network (VPN)

- Embedded IPsec & PPTP client/server
- IKE key management
- DES, 3DES and AES encryption for IPsec
- MPPE Encryption for PPTP
- L2TP over IPsec
- L2TP/PPTP/IPsec pass-through

## Management

- 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 supported
- Supports DHCP server/client/relay

## Quality of Service Control

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

## Operating Environment

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

Specifications in this datasheet are subject to change without prior notice.

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### Billion Electric Co., Ltd.

8F, No. 192, Sec. 2, Chung Hsing Road,  
Hsin Tien City, Taipei County, Taiwan  
TEL: +886-2-29145665  
FAX: +886-2-29186731, +886-2-29182895

[www.billion.com](http://www.billion.com)