



## BiPAC 8200VAZ

### 3G/4G LTE Embedded V/ADSL2+ Wireless-AC VoIP VPN Firewall Router

The BiPAC8200VAZ, triple-WAN, EWAN, 3G/LTE and VDSL&ADSL2+ firewall router is integrated with the 802.11ac (5GHz) + 802.11n (2.4GHz) Wireless Access Point and 4-port Giga switch. It is a cutting-edge networking product for SOHO and residential users. Uniquely, the router allows users to directly insert 3G/4GLTE SIM card into its built-in SIM slot instead of requiring external USB modems. This design will avoid compatibility issues of many different 3G/LTE USB modems. With the increasing popularity of the 3G/4GLTE standard, communication via the BiPAC8200VAZ is becoming more convenient and widely available - enabling users to use 3G/4GLTE, and UMTS Internet connection, making downstream rates of up to 150Mbps possible<sup>\*3</sup>. Users can watch movies, download music or access e-mail wherever a 3G/4G LTE connection is available.

#### 3G/4G LTE Mobility and Always-On Connection

The BiPAC8200VAZ router allows you to insert 3G/4G LTE SIM card to its built-in SIM slot, enabling you to use a 3G/4G LTE Internet connection, which makes downstream rates of up to 150Mbps<sup>\*3</sup> possible. With the increasing popularity of the 3G/4GLTE standard, communication via the BiPAC8200VAZ is becoming more convenient and widely available - allowing you to watch movies, download music on the road, or access e-mail no matter where you are. You can even share your Internet connection with others, no matter if you're in a meeting, or speeding across the country on a train. The BiPAC8200VAZ provides failover & fallback feature. These features are perfect for office situations where constant connection is paramount.

#### Smooth, Responsive Net Connection

Quality of Service (QoS) gives user full control over outgoing data traffic. Priority can be assigned by the router to ensure that important transmissions like gaming packets, VoIP calls or IPTV/streaming content passes through the router at lightning speed, even when there is heavy Internet traffic. The speed of different types of outgoing data passing through the router is also controlled to ensure that users do not saturate bandwidth with their browsing activities.

#### Maximum Performance Dual-band Wireless Router

Featured with simultaneous dual-band technology, the BiPAC 8200VAZ can run both 2.4GHz and 5GHz frequency bands at the same time, offering ultra-fast wireless speeds of up to 867Mbps (5GHz) and 300Mbps (2.4GHz), and SSIDs on both bands. The BiPAC 8200VAZ, by adopting this state-of-the-art technology, allows for multiple-demand applications, such as streaming HD videos and multiplayer gaming simultaneously. The Wireless Protected Access (WPA-PSK/WPA2-PSK) and Wireless Encryption Protocol (WEP) features enhance the level of transmission security and access control over wireless LAN. The router also supports the Wi-Fi Protected Setup (WPS) standard, allowing users to establish a secure wireless network by simply pushing a button.

#### Experience Gigabit

The BiPAC 8200VAZ-1200 has four Gigabit LAN ports and one Giga Ethernet port as an Ethernet WAN port. This EWAN offers another broadband connectivity option for connecting to a cable, DSL, fiber modem.

#### Secure VPN Connections

The BiPAC8200VAZ-1200 supports embedded IPSec VPN (Virtual Private Network) protocols, allowing users to establish encrypted private connections over the Internet. You can access your corporate Intranet and transmit sensitive data between branch offices and remote sites anytime; even when you are out of office, thus enhancing productivity.

- ✓ Compliant with VDSL2/ADSL2+ standards
- ✓ Triple-WAN ports for 3G/4G LTE, VDSL2/ADSL2+ fallback, Gigabit Ethernet WAN (EWAN) for broadband connectivity
- ✓ Load balance among multiple WAN interfaces
- ✓ Embedded LTE and SIM slot
- ✓ Simultaneous dual-band Wireless 867Mbps (5GHz) and 300Mbps (2.4GHz)
- ✓ Gigabit EWAN and LAN ports
- ✓ IPv6 ready (IPv4/IPv6 dual stacks)
- ✓ Fibre (FTTC/FTTP/FTTH) ready with high WAN throughput via EWAN port
- ✓ NBN (National Broadband Network) ready<sup>\*1</sup>
- ✓ USB port for storage.
- ✓ QoS for traffic prioritization and bandwidth management
- ✓ Secure VPN with powerful DES/3DES/AES
- ✓ Compliant with IEEE 802.11a/b/g/n and 802.11ac standards
- ✓ WPS (Wi-Fi Protected Setup) for easy setup
- ✓ Wireless security with WPA-PSK/WPA2-PSK
- ✓ Multiple wireless SSIDs with wireless guest access and client isolation
- ✓ Supports bridge grouping
- ✓ SOHO firewall security
- ✓ Auto failover and fallback
- ✓ VoIP SIP protocol
- ✓ Supports IPTV application<sup>\*2</sup>
- ✓ Ideal for home, SOHO, retail stores

## Features & Specifications

### VDSL2/ADSL2+ Compliance

- Compliant with xDSL standard
  - ITU-T G.993.2 (VDSL2)
  - ITU-T G.998.4 (G.inp)
  - ITU-T G.993.5 (G.vector)
  - ITU-T G.992.3 (G.dmt.bis) Annex A, B, I, J, L and M.
  - ITU-T G.992.5 (G.dmt.bis plus)
  - Full-rate ANSI T1.413 Issue 2
  - ITU-T G.992.1 (G.dmt) Annex A, B
  - ITU-T G.992.2 (G.lite) Annex A, B
- Supports VDSL2 band plan: 997 and 998
- ADSL2/2+ fallback modes
- Supports VDSL2 profiles: 8a, 8b, 8c, 8d, 12a, 12b, 17a, 30a and 35b.
- Supports ATM and PTM modes
- Supports Dying Gasp

### 3G/4G LTE \*3

- LTE: peak downlink speed of up to 150Mbps and peak uplink speed of up to 50Mbps
  - Supports multi-band FDD LTE: B1/B3/B5/B7/B8/B20
  - Supports multi-band TDD LTE: B38/B40/B41
  - Supports multi-band WCDMA: B1/B5/B8

### Network Protocols and Features

- IPv4 or IPv4/IPv6 dual stack
- NAT, static (v4/v6) routing and RIP-1/2
- IPv6 stateless/stateful address auto-configuration
- IPv6 router advertisement
- IPv6 over PPP
- DHCPv6
- IP tunnel IPv6 in IPv4 (6RD)
- IP tunnel IPv4 in IPv6 (DS-Lite)
- Universal Plug and Play (UPnP) compliant
- Dynamic Domain Name System (DDNS)
- Virtual server and DMZ
- SNTP, DNS relay, IGMP proxy and IGMP snooping for video service
- MLD proxy and MLD snooping for video service
- Management based on IP protocol, port number and address
- Supports Bridge Grouping

### Firewall

- Built-in NAT firewall
- Stateful Packet Inspection (SPI)
- Prevents DoS attacks including Land Attack, Ping of Death, etc
- Remote access control for web based access
- Packet filtering - port, source IP address, destination IP address
- URL content filtering - string or domain name detection in URL string
- MAC filtering
- Password protection for system management

### Virtual Private Network (VPN)

- IPSec VPN tunnels
- IKE key management
- DES, 3DES and AES encryption for IPSec
- IPSec pass-through
- GRE (Generic Routing Encapsulation) tunnel
- Supports L2TP, PPTP, and L2TP over IPSec.
- Supports OpenVPN.

### 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

- Compliant with xDSL standard
- ATM Adaptation Layer Type 5 (AAL5)
- Multiple protocol over AAL5 (RFC 2684, formerly RFC 1483)
- Bridged or routed Ethernet encapsulation
- VC-based 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

### IPTV Applications \*2

- IGMP snooping and IGMP proxy
- MLD snooping and MLD proxy
- Bridge Grouping
- Supports VLAN MUX
- Quality of Service (QoS)

### Wireless LAN

- Compliant with IEEE 802.11a/b/g/n/ac standards
- 2.4 GHz and 5 GHz frequency range
- Up to 1200Mbps wireless operation rate
- WPS (Wi-Fi Protected Setup) for easy setup
- Supports WPS
- 64/128 bits WEP supported for encryption
- Wireless security with WPA-PSK/WPA2-PSK
- Multiple wireless SSIDs with wireless guest access and client isolation

### USB Application Server

- Storage/NAS: FTP server, samba server

### VoIP

- One RJ-11 FXS port for connecting to regular telephone
- Compliant with SIP standard
- Supports G.711 A/μ law, G.722, G.722.2, G.726, and G.729 Audio Codec standards

### Management

- Web-based GUI for remote and local management (IPv4/IPv6)
- Firmware upgrade and configuration data upload and download via web-based GUI
- Embedded Telnet server for remote and local management
- Supports SNMP
- Supports DHCP server/client/relay
- TR-069 \*4 supports remote management
- Load balance
- Auto failover and fallback

### Hardware Specifications

#### Physical Interface

- WLAN: 2 external antennas
- LTE: 2 external antennas
- DSL: VDSL port
- USB 2.0: support storage service
- Ethernet: 4-port 10/100/1000M auto-crossover (MDI/MDI-X) switch
- EWAN: one 10/100/1000M Ethernet port as a WAN interface for broadband connectivity
- FXS \* 1 for VoIP SIP
- SIM slot
- Factory default reset button
- WPS push button
- Wireless enable/disable button
- Power jack
- Power switch

#### Physical Specifications

- Dimensions: 8.86" x 7.20" x 2.87"  
(225 mm x 183 mm x 73 mm)

#### Power Requirements

- Input: 15V DC, 2.0A

#### Operating Environment

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

#### \*Notes:

- This is only applicable for Australia and New Zealand.
- Only upon request for Telco / ISP tender projects.
- The 3G/4GLTE data rate is dependent on the embedded module and your local service provider.
- On request for Telco / ISP projects
- Specifications in this datasheet are subject to change without prior notice