

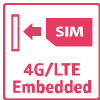


BiPAC 4500VNOZ R2

4G/LTE Wireless VoIP VPN Router

BiPAC 4500VNPZ R2

4G/LTE Wireless VoIP Router



BiPAC 4500VNOZ R2/ BiPAC 4500VNPZ R2

The BiPAC 4500VNOZ R2/ 4500VNPZ R2 supports the state-of-the-art 4G/LTE network which is reliable, scalable and flexible for indoor applications. Embedded with 4G/LTE module and Gigabit EWAN interfaces, the BiPAC 4500VNOZ R2/ 4500VNPZ R2 enables high-speed and secured Internet connectivity for home, SOHO, and enterprise users. With an integrated 802.11n 2.4GHz wireless access point and 4-port Gigabit Ethernet LAN, the BiPAC 4500VNOZ R2/ 4500VNPZ R2 can run wireless and 10 times faster LAN connection than the regular FAST Ethernet LAN. Meanwhile, the device integrates with two FXS ports allowing simultaneous VoIP calls, and users can choose the most economical rate of VoIP calls provided by different providers.



4G LTE Mobility

With 4G/LTE-based Internet connection (embedded 4G/LTE module), users can access the Internet while sitting on anywhere.

Automatic Failover/Failback between 4G/LTE and Gigabit EWAN

Uniquely embedded with 4G/LTE and Gigabit EWAN interfaces, BiPAC 4500VNOZ R2/ 4500VNPZ R2 ensures a seamless Internet connectivity by featuring superior Failover/Failback functionality between 4G/LTE and EWAN. Either wired or wireless connection can be set up as primary or backup WAN port. When the main WAN interface fails, the secondary WAN interface will automatically back up the connection to ensure an always-on connectivity.



Wireless Mobility and Security

With an integrated high transmission power 802.11n access point, BiPAC 4500VNOZ R2/ 4500VNPZ R2 is available everywhere in the house or office. Multiple SSIDs with Client Isolation to enhance the level of transmission security and access control over the Wireless LAN. The network manager can assign different policies and functions for each SSID, increasing the flexibility and efficiency of the network infrastructure.



Secured VPN connection (BiPAC 4500VNOZ R2 only)

Supporting comprehensive and robust VPN (Virtual Private Network) protocols including IPSec, OpenVPN, GRE, PPTP, L2TP, BiPAC 4500VNOZ R2 allows users can establish private and encrypted data transmission tunnels over the public Internet between headquarter and branch offices. With a built-in DES/3DES VPN accelerator, BiPAC 4500VNOZ R2 dramatically enhances IPSec VPN performance.



VoIP Supplemental Services

The BiPAC 4500VNOZ R2/ 4500VNPZ R2 complies with SIP protocol and the most popularly adopted VoIP standard to ensure interoperability with SIP devices and major VoIP Gateways, supporting a variety of telephony applications including Hot-line/Warm-line, Call Forwarding, Call Transfer, Call Waiting, 3-way Conference Call, Anonymous Call, Block Anonymous Call and Don't Disturb.



High Performance

- High speed 4G/LTE module^{*1}
- Gigabit Ethernet WAN and LAN

High Availability

- Fully supports for multiple LTE frequency bands^{*1}
- Dual-WAN interfaces - 4G/LTE and Gigabit EWAN
- High transmission power 802.11n 2.4GHz
- Multiple wireless SSIDs with wireless client isolation

Secure VPN Connections

- (BiPAC 4500VNOZ R2 only)
- Embedded IPSec, GRE, OpenVPN, PPTP, L2TP with powerful encryption

VoIP Supplemental Services

- Hot-line/ Warm-line, Call Forwarding, Call Transfer, Call Waiting, 3-way Conference Call, etc.

IPv6 Support

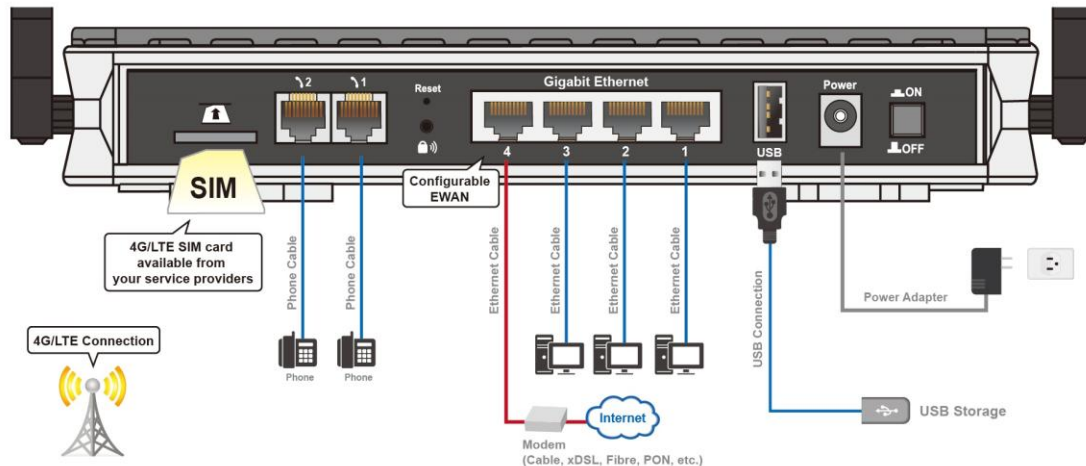
- IPv4, IPv6, IPv4/ IPv6 dual stack^{*2}

USB Storage/ NAS

- Embedded SAMBA server, FTP server

Ideal for SOHO, office, and home users

Application Diagram



Features & Specifications

High-speed Mobile Wireless Communication

- Embedded high performance 4G/LTE module¹
- High performance external antenna

Embedded 4G/LTE¹

- Supported frequency bands: (4G/LTE)
 - LTE-FDD: B1(2100MHz), B3(1800MHz), B5(850MHz), B7(2600MHz), B8(900MHz), B20(800MHz),
 - LTE-TDD: B38(2600MHz), B40(2300MHz), B41(2500MHz)
- Supported data rate: (4G/LTE)
 - LTE-FDD: Max 150Mbps (DL) Max 50Mbps (UL)
 - LTE-TDD: Max 130Mbps (DL) Max 35Mbps (UL)
- Downlink MIMO support

Network Protocols and Features

- Dual WAN Failover/ Failback
- IPv4, IPv6, IPv4/IPv6 dual stack²
- Dual APN
- Keep Alive
- IP Pass-Through
- NAT, Virtual Server and DMZ
- Static Routing, Dynamic Routing (RIP v1/v2, OSPF, BGP)
- SNTP, DNS relay and DDNS
- Universal Plug and Play (UPnP) compliant
- Supports DHCP server/ client/ relay

VoIP

- Compliant with SIP standard (RFC3261)
- Codec: G.729, G.726, G.711 A-Law, G.711 u-Law
- DTMF method: Inband, RFC 2833, SIP Info
- T.38 Fax relay
- Caller ID generation: DTMF, FSK
- Silence Suppression (VAD), Echo Cancellation
- Hot-line/ Warm-line
- Call Forwarding, Call Transfer
- Call Waiting, 3-way Conference Call
- Anonymous Call, Block Anonymous Call
- Speed Dial, Return Call, Redial
- Dial Plan
- Don't Disturb Function
- VoIP NAT Traversal

Virtual Private Network (BiPAC 4500VNOZ R2 only)

- IPSec
- PPTP
- L2TP
- GRE
- OpenVPN

Firewall

- Built-in NAT Firewall
- Stateful Packet Inspection (SPI)
- Prevents DoS attacks including Land Attack, Ping of Death, etc.
- Access Control
- IP Filtering, MAC Filtering, URL Filtering
- VPN pass-through

Wireless LAN

- IEEE 802.11b/g/n 2.4GHz compliant
- Up to 300Mbps wireless operation rate at 2.4GHz
- High transmission power
- 64/128 bits WEP supported for encryption
- Wireless security with WPA-PSK, WPA2-PSK, Mixed WPA/WPA2-PSK
- WPS (Wi-Fi Protected Setup) for easy setup
- Multiple wireless SSIDs
- Wireless MAC Filtering
- Wireless Client Isolation

USB Applications Server

- Storage/NAS: FTP server, SAMBA server

Management

- Password protection for system management
- Quick installation wizard
- Web-based GUI for remote and local management
- Firmware upgrades and configuration data upload and download via Web-based GUI
- TR-069 (CWMP)², SNMP
- 3G/ 4G LTE Usage Allowance
- Syslog monitoring
- Scheduling Auto-Reboot

Hardware Specifications

Physical Interface

- Two (2) detachable high performance 4G LTE antennas
- Two (2) internal 2.4GHz antennas
- Four (4) Gigabit Ethernet auto-crossover (MDI/MDI-X) switch
- One (1) USB 2.0 host type A
- Two (2) FXS Telephone ports
- One (1) 2FF mini-SIM slot
- Factory default reset button
- Wireless on/off and WPS push button
- Power jack for DC input

Physical Specifications

- Dimensions: 9.04" x 6.10" x 1.69" (229.5 mm x 155 mm x 43 mm)

Power Requirements

- DC power input: 15V DC, 1.6A

Operating Environment

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

Notes:

1. The 4G LTE is dependent on your local service provider.
2. Only upon request for Telco/ ISP tender projects.
3. Dual APN is not supported on some specific SKU, please confirm it with our sales.
4. Specifications in this datasheet are subject to change without prior notice.