



BiPAC 5500VA

5G NR Dual-Band Wireless
VoIP VPN Router

BiPAC 5500VA - 5G NR Dual-Band Wireless VoIP VPN Router



The BiPAC 5500VA supports 5G NR(sub-6G), the newest generation standard of Wireless Wide Area Network products. BiPAC 5500VA embedded with 5G NR module backward compatibility with 4G LTE, also provides Gigabit Ethernet WAN interfaces, with an integrated 802.11n/ac dual-band wireless access point and 4-port Gigabit Ethernet LAN, enables high-speed and secured Internet connectivity for home, SOHO, and enterprise users.

5G NR Mobility

With the newest 5G NR network connectivity, users can enjoy an unprecedented Internet accessing experience.



Automatic Failover/Failback between 5G NR and Gigabit EWAN

Uniquely embedded with 5G NR and Gigabit Ethernet WAN interfaces, BiPAC 5500VA ensures an Internet connectivity by featuring superior Failover/Failback functionality between 5G NR and GbE WAN. 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.



802.11n/ac Dual-Band Wireless Access Point

BiPAC 5500VA integrated Wi-Fi 802.11n/ac 2.4GHz and 5GHz dual-band wireless AP, the combined throughput can reach up to 2.3 Gbps data rate (1733 Mbps at the 5 GHz band and 600 Mbps at the 2.4 GHz band). 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

Supporting comprehensive and robust VPN (Virtual Private Network) protocols including IPSec, OpenVPN, GRE, PPTP, L2TP, BiPAC 5500VA 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 5500VA dramatically enhances IPSec VPN performance.



Advanced Networking

BiPAC 5500VA integrated SPI Firewall, QoS, Dynamic Routing(BGP, OSPF), IPv6, TR-069 and so on features, it can meet various security and application requirements.



VoIP Supplemental Services

The BiPAC 5500VA 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 performance 5G NR(sub-6G) module ^{*1}
- Gigabit Ethernet WAN and LAN
- Dual-Band wireless reaches 2.3 Gbps

High Availability

- Support multiple 5G NR(sub-6G) frequency bands ^{*1}
- Dual-WAN interfaces - 5G NR and Gigabit Ethernet WAN
- Dual-Band wireless - 2.4GHz and 5GHz
- Multiple wireless SSIDs with wireless client isolation

Secure VPN Connections

- Embedded IPSec, GRE, OpenVPN, PPTP, L2TP with powerful encryption

Quality of Service(QoS)

- Rate Limited or Guaranteed

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}

CWMP(TR-069)

- Supports CWMP(TR-069) ^{*2}

USB Storage/ NAS

- Embedded SAMBA server, FTP server

Ideal for SOHO, office, and home users

Application Diagram



BiPAC 5500VA Front



BiPAC 5500VA Rear View

Features & Specifications

Ultra High Speed Mobile Wireless

Communication

- Embedded high performance 5G NR(sub-6G) module¹
- High performance external antenna

Embedded 5G NR

- Frequency bands and data rate depend on equipped 5G NR(sub-6G) module¹

Network Protocols and Features

- Dual WAN Failover/ Failback
- IPv4, IPv6, IPv4/IPv6 dual stack²
- Dual APN²
- 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

- 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 802.11a/b/g/n/ac compliant
- Concurrent dual-band 802.11a/n/ac(5GHz) and 802.11b/g/n(2.4GHz)
- Up to 1733Mbps wireless operation rate at 5GHz
- Up to 600Mbps wireless operation rate at 2.4GHz
- 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
- Supports WDS repeater function

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
- 5G NR Usage Allowance
- Syslog monitoring
- Physical layer/protocol diagnostic test tool
- Scheduling Auto-Reboot

Hardware Specifications

Physical Interface

- Four (4) detachable high performance 5G NR(FR1) antennas
- Two (2) detachable 2.4GHz and 5GHz dual-band antennas
- Two (2) internal 2.4GHz and 5GHz dual-band 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: 229.5 mm x 155 mm x 43 mm (9.04" x 6.10" x 1.69")

Power Requirements

- DC power input: 15V DC, 2.0A

Operating Environment

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

Notes:

1. The 5G NR is dependent on your local service provider.
2. Only upon request for Telco/ ISP tender projects.
3. Specifications in this datasheet are subject to change without prior notice.