

# **BiPAC 7600N(L)**

## Fibre/Cable Gigabit Wireless-N (VPN) ADSL2+ Router

The BiPAC 7600N(L) is an advanced ADSL2+ router with Gigabit WAN and LAN for home, SOHO and office users that offers flexible and multiple ways to enjoy high-speed and high-level secure Internet connectivity.

The Dual WAN interface allows connection to current superfast fibre connections (FTTC) and future ultra-fast connectivity (FTTP/FTTH), with WAN throughput in excess of 900Mbps.

With an integrated 802.11n wireless access point and 4-port Gigabit Ethernet LAN ports, the gateway enables faster wireless speeds of up to 300Mbps and LAN connection 10 times faster than regular 10/100Mpbs Ethernet LAN.

## **Always-On Connectivity**

With the BiPAC 7600N(L), the auto fail-over feature ensures maximum connectivity and minimum interruption by quickly and smoothly connecting to backup WAN line in the event that your main WAN line fails. The BiPAC 7600N(L) will then automatically reconnect to the main WAN line connection when it's restored, ideal for office situations where a constant and uninterrupted connection is critical.

## Wireless Mobility and Security

With an integrated 802.11n Wireless Access Point, the router delivers up to 3 times the wireless coverage of a 802.11b/g network device, so that wireless access is available everywhere in the house or office. If your network requires wider coverage, the built-in Wireless Distribution System (WDS) allows you to expand your wireless network without additional wires or cables. The BiPAC 7600N(L) also supports the Wi-Fi Protected Setup (WPS) standard and allows users to establish a secure wireless network just by pressing a button. Multiple SSIDs allow users to access different networks through a single access point. Network managers can assign different policies and functions for each SSID, increasing the flexibility and efficiency of the network infrastructure.

## Secure VPN Connections (BiPAC 7600N only)

The BiPAC 7600N supports comprehensive and robust IPSec VPN (Virtual Private Network) protocols for business users to establish private encrypted tunnels over the public Internet to secure data transmission between headquarters and branch offices. It also supports VPN dial in from smart phones (Android/ iPhone) for secure remote Internet connection via your home broadband. With a built-in DES/3DES VPN accelerator, the router enhances IPSec VPN performance significantly.

## IPv6 Ready - Pathway to the Future

The BiPAC 7600N(L) fully supports IPv6 (Internet Protocol Version 6), launched as the current IPv4 range is filling up, and IPv6 is gradually becoming the indispensable addressing system for savvy cloud computing users. Dual stack means the router is capable of running IPv4 and IPv6 in parallel during the transition period. With Billion IPv6 enabled devices, three major transition mechanisms such as Dual-Stack, Dual-Stack Lite, and 6RD (IPv6 rapid deployment) are supported to be adapted easily into service provider's IPv4/IPv6 network.\*

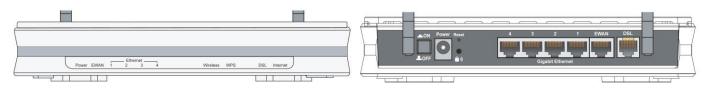


- Dual-WAN ports for ADSL2+, Gigabit Ethernet WAN (EWAN) for broadband connectivity
- Auto failover feature to ensure an always-on connectivity
- 802.11n wireless AP with high-speed wireless connection up to-300Mbps data rate
- Supports Wi-Fi Protected Setup (WPS) and WPA-PSK/WPA2-PSK
- Gigabit EWAN and LAN
- Fibre (FTTC/FTTP/FTTH) ready with high WAN throughput
- Embedded IPSec, PPTP and L2TP VPN endpoint/server with powerful encryption (BiPAC 7600N only)
- 24 VPN tunnels (BiPAC 7600N only)
- IPv6 ready (IPv4/IPv6 dual stacks)
- Dual-Stack Lite and 6RD (IPv6 rapid deployment)\*1
- QoS for traffic prioritization management
- Multiple wireless SSIDs with wireless guest access and client isolation
- Supports IPTV Applications\*2
- Ideal for SOHO, office, and home users

E-mail: marketing@billion.com

FAX: +866-2-2918-6731,+886-2-2918-2895





▲ BiPAC 7600N(L) front panel

▲ BiPAC 7600N(L) rear panel

## Features & Specifications

## **ADSL Compliance**

- · Compliant with ADSL/2/2+ Standard

  - ITU-T G.992.5 (G.dmt.bis plus) ITU-T G.992.5 Annex M (ADSL2+ Annex M)

  - ITU-T G.992.3 (G.dmt.bis) ITU-T G.992.3 Annex M (ADSL2 Annex M)
  - Full-rate ANSI T1.413 Issue 2
  - ITU-T G.992.1 (G.dmt)
  - ITU-T G.992.2 (G.lite) - ITU-T G.994.1 (G.hs)
  - ITU-T G.998.4 (G.inp)
- · Support Annex A, I, J, M & L

#### **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, RFC 2516)
- PPP over ATM (PPPoA, RFC 2364)
- OAM F4 / F5 loopback

## **Network Protocols and Features**

- DHCP Client Static IP
- IPv4, IPv6, IPv4/IPv6 dual stack
- Dual-Stack Lite and 6RD (IPv6 rapid deployment)
- NAT, static routing and RIP v1/v2
- Dual WAN failover and failbackDual WAN load balance (BiPAC 6300NX only)
- Virtual server and DMZ
- SNTP, DNS proxy
- Universal Plug and Play (UPnP) compliant
- Dynamic Domain Name System (DDNS)
- IGMP proxy and IGMP snooping
- · MLD proxy and MLD snooping

## **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
- · Password protection for system management
- · VPN pass-through

## **Quality of Service Control**

· Traffic prioritization and bandwidth management based-on IP protocol, port number and address

# Virtual Private Network (VPN) (BiPAC 7600N

- 8 IPSec VPN Tunnels8 PPTP VPN Tunnels (Dial-in: 4, Dial-out: 4)
- 8 L2TP VPN Tunnels (Dial-in: 4, Dial-out: 4)

## IPTV Applications\*2

- · IGMP proxy and IGMP snooping
- MLD proxy and MLD snooping
- Virtual LAN (VLAN)
- Quality of Service (QoS)

#### Wireless LAN

- Compliant with IEEE 802.11n, 802.11g and 802.11b standards
- 2.4GHz 2.484GHz frequency range
- Up to 300Mbps wireless operation rate
- 64/128 bits WEP supported for encryption
- · Wireless security with WPA-PSK/WPA2-PSK
- WPS (Wi-Fi Protected Setup) for easy setup
- · Multiple wireless SSIDs with wireless guest access and client isolation
- Supports WDS repeater function

## Management

- · Quick installation wizard
- · Web-based GUI for remote and local management
- Firmware upgrades and configuration data upload and download via web-based GUI
- Supports DHCP server/client/relay (WAN port)
- TR-069\*3 (CWMP) supports remote management
- Supports SNMP

## **Hardware Specifications**

## **Physical Interface**

- DSI : ADSI port
- WLAN: 2 detachable antennas
- Ethernet: 4-port 10/100/1000Mbps auto-crossover (MDI/ MDI-X) switch
- EWAN: RJ-45 Gigabit Ethernet port for connecting to ADSL/Cable/VDSL/Fibre modem device
- · Factory default reset button
- · Wireless on/off and WPS push button
- Power jack
- · Power switch

#### **Physical Specifications**

• Dimensions: 9.04" x 6.10" x 1.46" (229.5 mm x 155 mm x 37mm)

#### **Power Requirements**

• Input: 12V DC, 1.5A

## **Operating Environment**

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

Notes:

1. Future release and only upon request for Telco/ ISP tender projects.

2. IPTV application may require subscription to IPTV services from a Telco/ISP.

3. Only upon request for Telco/ ISP tender projects. 4. Specifications in this datasheet are subject to change without prior notice.

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