





## **BiPAC 7800DXL**

# Triple-WAN Dual-Band Wireless-N 600Mbps 3G/4G LTE ADSL2+/Fibre Broadband Router

The Billion BiPAC 7800DXL is a fibre-ready triple-WAN ADSL2+ dual-band modem router, an all-in-one advanced device including concurrent dual-band Wireless-N 600Mbps (2.4GHz and 5GHz), Gigabit Ethernet, 3G/4G LTE, and NAS (Network Attached Storage) in one unit. As well as being IPv6-capable, the BiPAC 7800DXL ADSL2+ router supports superfast fibre connections via dual-WAN connectivity through a Gigabit Ethernet WAN port. It also has a USB port, allowing the device to act as a print server as well as a NAS (Network Attached Storage) device with DLNA (Digital Living Network Alliance) and FTP (File Transfer Protocol) access. Moreover, the USB port can host a 3G/4G LTE modem connecting to the 3G/4G LTE network for Internet access. With an array of advanced features, the Billion BiPAC 7800DXL delivers a future-prof solution for ADSL2+ connections, superfast FTTC and ultra-speed FTTH (Fibre-To-The-Home) network deployment and services.

#### Maximum Performance Dual-band Router

Featured with simultaneous dual-band technology, the BiPAC 7800DXL can run both 2.4GHz and 5GHz frequency bands at the same time, offering ultra-fast wireless speeds of up to 600Mbps and multiple SSIDs on both bands. The BiPAC 7800DXL, by adopting this state-of-the-art technology, allows for multiple-demand applications, such as streaming HD videos and multiplayer gaming simultaneously. With an integrated 802.11n Wireless Access Point, the router delivers up to 6 times the speed of an 802.11a/b/g network device. It supports a data rate of up to 600Mbps (2.4GHz and 5GHz) and is also compatible with 802.11a/b/g equipment. 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. If your network requires wider coverage, the built-in Wireless Distribution System (WDS) repeater function allows you to expand your wireless network without the need for any external wires or cables.

### 3G/4G Mobility and Always-On Connectivity

With the BiPAC 7800DXL you can connect a 3G/4G LTE USB modem to its built-in USB port, allowing you to watch movies, download music or access e-mail no matter where you may be. You can even share your Internet connection with others, when away on business, at a show, or wherever there is mobile signal but no fixed line access. The auto fail-over feature ensures maximum connectivity and minimum interruption by quickly and smoothly connecting to a 3G/4G LTE network in the event that your ADSL/fibre/cable line fails. The BiPAC 7800DXL will then automatically reconnect to the ADSL/fibre/cable connection owhen it's restored, reducing connection costs. These features are perfect for office situations where a constant and uninterrupted connection is critical.

### **Experience Gigabit**

The BiPAC 7800DXL has four Gigabit LAN ports and the fourth port can be configured as a WAN port if required. This EWAN offers another broadband connectivity option for connecting to a cable, VDSL, fibre or second ADSL modern. The BiPAC 7800DXL again offers users convenience and optimal network performance with data rates reaching up to 1Gbps.

#### Pathway to the Future

The BiPAC 7800DXL 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.





- Triple-WAN ports for 3G/4G LTE, ADSL2+, Gigabit Ethernet WAN (EWAN) for broadband connectivity
- Simultaneous dual-band Wireless-N 600Mbps (2.4GHz and 5GHz)
- Gigabit WAN and LAN
   Fibre (FTTC)(FTTD)(FTTL)) reg
- Fibre (FTTC/FTTP/FTTH) ready with high WAN throughput
- IPv6 ready (IPv4/IPv6 dual stacks)
   USB port for print server, NAS, DLNA media server, and 3G/4G LTE USB modem
- SNR adjustments to achieve highest sync speeds
- Monitoring of individual LAN ports
  QoS for traffic prioritization and
- bandwidth management
- Broadcom chipset for better stabilityMultiple wireless SSIDs with wireless
- guest access and client isolation • Supports IPTV applications<sup>\*2</sup>
- Supports IP 1V applications
   NBN (National Broadband Network) ready<sup>3</sup>
- Supports port-based Virtual LAN (VLAN)
- Available Syslog
- Dynamic Domain Name System (DDNS)
- Ideal for SOHO and home users







## **Features & Specifications**

- ADSL Compliance · Compliant with ADSL standard
- Full-rate ANSI T1.413 issue 2
- G.dmt (ITU G.992.1)
- G.lite (ITU G.992.2)
- G.hs (ITU G.994.1)
- ADSL over ISDN/U-R2
- · Compliant with ADSL2 standard
- G.dmt.bis (ITU G.992.3)
- ADSL2 Annex M (ITU G.992.3 Annex M)
- · Compliant with ADSL2+ standard - G.dmt.bis plus (ITU G.992.5)
- ADSL2+ Annex M (ITU G.992.5 Annex M)

## Network Protocols and Features · IPv4 or IPv4/IPv6 dual stacks

- 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 port-based Virtual LAN (VLAN)

#### **Firewall**

\*Notes

- · Built-in NAT firewall
- · Stateful Packet Inspection (SPI)
- · DoS attack prevention
- · Packet filtering (v4/v6) port, source IP address, destination IP address, MAC address
- · URL content filtering (v4/v6) string or domain name detection in URL string

### **Quality of Service Control**

1. On request for Telco/ISP projects.

BILLION

Copyright © Billion Electric Co., Ltd. All rights reserved.

· Supports the DiffServ approach Traffic prioritization and bandwidth management based-on IPv4/IPv6 protocol, port number and address

 IPTV application may require subscription to IPTV services from a Telco/ISP.
 This is only applicable for Australia and New Zealand. 4. Specifications on this datasheet are subject to change without prior notice.

- 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)
- · OAM F4/F5

- IPTV Application<sup>\*2</sup> IGMP snooping and IGMP proxy
- MLD snooping and MLD proxy
- · Virtual LAN (VLAN)
- · Quality of Service (QoS)

#### Wireless LAN

- · Compliant with IEEE 802.11a/b/g/n standards
- 2.4GHz and 5.0GHz frequency bands
- $\cdot$  Up to 600Mbps wireless operation rate
- WPS (Wi-Fi Protected Setup) for easy setup
- Supports WPS v2
- · 64/128 bits WEP supported for encryption
  · Wireless security with WPA-PSK/WPA2-PSK
- · Multiple wireless SSIDs with wireless guest
- access and client isolation
- · WDS repeater function

#### **USB Application Server**

- · 3G/4G LTE USB modem
- Storage/NAS: FTP server, samba server, and
- DLNA media server
- Print server

#### Management

- · Easy Sign-On (EZSO) 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

TEL: +886-2-2914-5665

E-mail: marketing@billion.com

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

- management
- SNMP v1, v2, MIB-I and MIB-II support Supports DHCP server/client/relay
- TR-069\*1 supports remote management Available syslog
- Mail alert for WAN IP changed Auto failover and fallback
- · Push service

**Billion Electric Co., Ltd.** 

8F., No.192, Sec. 2, Zhongxing Rd.,

Xindian Dist., New Taipei City 231,

Taiwan (R.O.C.)

#### Hardware Specifications

- Physical Interface
- WLAN: 2 fixed antennas
- · DSL: ADSL port
- · USB 2.0 supports storage service, print server, and 3G/4G LTE USB modem
- Ethernet: 4-port 10/100/1000M auto-crossover (MDI/MDI-X) switch
- EWAN: Ethernet port #4 can be configured as a
- WAN interface for broadband connectivity
- · Factory default reset button · WPS push button
- Power jack · Power switch

#### **Physical Specifications** • Dimensions: 9.04" x 6.10" x 1.69"

(229.5 mm x 155 mm x 43 mm)

Operating temperature: 0°C ~ 40°C

Storage temperature: -20°C ~ 70°C

Models & Standards Supported • BiPAC 7800DXLA:

Supports Annex B and U-R2

Supports Annex A and Annex M

Humidity: 20% ~ 95% non-condensing

(Annex A and Annex M: ADSL over POTS)

V01032013-Global

www.billion.com

(Annex B and U-R2: ADSL over ISDN)

- Power Requirements
- Input: 15V DC, 1.6A

**Operating Environment** 

BIPAC 7800DXLU: