



## BiPAC 8800NL

### Wireless-N VDSL2(Fibre)/ADSL2+ Firewall Router

The BiPAC 8800NL is an all-in-one small footprint VDSL2/ADSL2+ broadband router with high-speed 802.11n wireless technology. It supports all UK networks regardless of connection type, working with ADSL2+, VDSL2 (FTTC), Fibre and Cable technology making it an ideal device for customers with BT Infinity, Sky Fibre, TalkTalk, Virgin Media, Plusnet etc. Users can enjoy ADSL2+ and VDSL2 services and broadband multimedia applications such as interactive gaming, video streaming and real-time audio much easier and faster than ever before with the renowned Broadcom chipset.

#### Very High-speed Connectivity for Internet Access

The BiPAC 8800NL complies with VDSL2 and ADSL2+ worldwide standards and it can support the downlink data rate of up to 100Mbps and uplink data rate of up to 50Mbps in VDSL2. It supports SNR adjustment on ADSL for greater stability, especially important on long lines, and vectoring on VDSL lines. It can also be used in modem mode only (PPPoA half-bridge mode or PPPoE bridge mode) for use in front of a dedicated firewall. It's also integrated with 3-port 10/100Mbps switch, 1-port Gigabit switch, and 802.11n wireless AP, enabling users to connect to multiple computers or devices easily.

#### Surfing Internet with Flexibility

The BiPAC 8800NL has four LAN ports and the fourth port can be configured as a WAN port if required. This EWAN (Ethernet WAN) port offers another broadband connectivity option for connecting to a cable or fibre modem. SOHO or small office users can even deploy the BiPAC 8800NL for FTTx (Fiber-to-the-building, node, or home) applications over a fibre device connection.

#### Optimal Wireless Speeds and Coverage

With an integrated 802.11n wireless access point, the router delivers up to 6 times the speed and 3 times the wireless coverage of an 802.11b/g network device. It supports a data rate up to 300Mbps and is also compatible with 802.11b/g equipment. The Wi-Fi Protected Access (WPA-PSK / WPA2-PSK) and Wired Equivalent Privacy (WEP) features enhance the level of transmission security and access control over wireless LAN. In addition multiple SSIDs and Time Scheduling functionality allows for flexible management of internet access for guests and kids through the web interface, and there is also a hardware wireless on/off switch.

#### USB Application Server

The BiPAC 8800NL supports multi-functional USB 2.0 port. You can share FTP, NAS, DLNA media server and files with your family throughout your home network.

#### Firewall Security and Smooth Traffic

With the built-in NAT default firewall, the advanced anti-hacker pattern-filtering protection features automatically detect and block Denial of Service (DoS) attacks. In addition, the packet filtering provides high-level security for access control. Quality of Service control prioritizes the traffic and allows users to enjoy smooth traffic while running applications such as P2P or multimedia through the Internet.

*Ideal for  
SOHO and  
Residential  
Users*

- Supports VDSL2 and ADSL2+
- 3-port 10/100Mbps switch and 1-port Gigabit switch
- Ethernet port #4 can be configured as a WAN interface for broadband connectivity
- USB port for FTP, NAS and DLNA media server
- SNR adjustments to achieve highest sync speeds
- Monitoring of individual LAN ports
- QoS for traffic prioritization and bandwidth management
- Compliant with IEEE 802.11b/g/n standards
- WPS (Wi-Fi Protected Setup) for easy setup
- Wireless security with WPA-PSK/WPA2-PSK
- Supports WDS repeater function
- SOHO firewall security
- IPv6 ready
- Supports IPTV application<sup>\*2</sup>
- Ease of use with quick installation wizard (EZSO)
- Broadcom chipset for better stability



## Features & Specifications

### VDSL/ADSL Compliance

- Compliant with xDSL Standard
- Full-rate ANSI T1.413 Issue 2
- ITU-T G.993.2 (VDSL2, supporting profile 8a, 8b, 8c, 8d, 12a, 12b, 17a)
- ITU-T G.992.1 (G.dmt)
- ITU-T G.992.2 (G.lite)
- ITU-T G.992.3 (G.lite)
- ITU-T G.992.3 Annex M (ADSL2 Annex M)
- ITU-T G.992.4 (G.lite.bis),
- ITU-T G.992.5 (G.dmt.bis plus)
- ITU-T G.992.5 Annex M (ADSL2+ Annex M)
- ITU-T G.994.1 (G.hs)
- Supports VDSL2 band plan: 997 and 998

### 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 port-based Virtual LAN (VLAN)

### Firewall

- 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

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

### 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 802.11b/g/n standards
- 2.4 GHz frequency range
- Up to 300Mbps 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
- Wireless LAN schedule control

### USB Application Server

- Storage/NAS: FTP server and DLNA media 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 management
- SNMP v1, v2, MIB-I and MIB-II support
- Supports DHCP server/client/relay
- TR-069<sup>\*3</sup> supports remote management
- Available syslog
- Mail alert for WAN IP changed
- Auto failover and fallback
- Push service

### Hardware Specifications

#### Physical Interface

- WLAN: internal antennas
- DSL: VDSL port
- USB 2.0 supports storage, FTP server and DLNA media server
- Ethernet: 3-port 10/100M and 1-port Gigabit 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
- Wireless on/off button
- Power jack
- Power switch

#### Physical Specifications

- Dimensions: 5.91" x 6.08" x 1.30"  
(150mm x 154.5mm x 32.9 mm)

#### Power Requirements

- Input: 12V DC, 2A

#### Operating Environment

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

#### \*Note:

- The router may require firmware modification for certain ADSL2/2+ Annex M DSLAMs.
- IPTV application may require subscribing to IPTV services from a Telco/ISP.
- On request for Telco / ISP projects
- Specifications in this datasheet are subject to change without prior notice.

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