

BiPAC 8400N(E)(X)L R2

Wireless-N VDSL2/ADSL2+ Firewall Router

The BiPAC 8400N(E)(X)L R2 is an all-in-one VDSL2/ADSL2+ broadband router with the latest 802.11n technology. It is designed for home and SOHO users who seek extreme mobility, high-speed wireless connection and better wireless coverage while maintaining high-speed broadband access with VDSL2/ADSL2+. Users can enjoy VDSL2 services and broadband multimedia applications such as interactive gaming, video streaming and real-time audio much easier and faster than ever before. With an integrated 802.11n wireless access point, the router enables faster wireless speeds of up to 300Mbps. The SOHO Firewall is integrated to provide protection against hacker attacks while the Quality of Service prioritizes queues and traffic for applications such as music downloads, online gaming, video streaming and file sharing.

Very High-speed Connectivity for Internet Access

The BiPAC 8400N(E)(X)L R2 complies with VDSL2 and ADSL2+ worldwide standards, the router supports the highest rate of up to 100Mbps/100Mbps in VDSL2 Profile (30a). It is also built-in with 4-port 10/100Mbps Fast Ethernet switch and 802.11n wireless AP, enabling users to connect to multiple computers or devices easily.

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 rates 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.

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, 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 IPTV, VoIP calls or interactive game through the Internet.

Easy Network Management

The Web-based user interface of the BiPAC 8400N(E)(X)L R2 makes it extremely easy for users to install and manage the network. The router supports both DHCP client and server, enabling system administrators to easily integrate this router into existing network environments, as well as manage IP assignment without having to reconfigure other stations.

USB Application Server

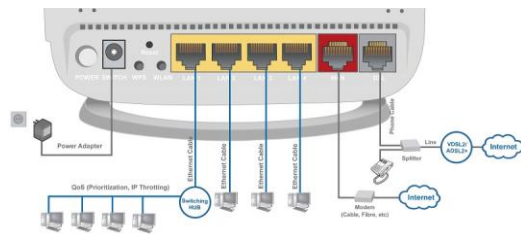
The BiPAC 8400N(E)(X)L R2 supports multi-functional USB 2.0 ports. You can share movie, music and files via BiPAC 8400N(E)(X)L R2 embedded SAMBA or FTP server with your family throughout your home network.

IPv6 Ready - Pathway to the Future

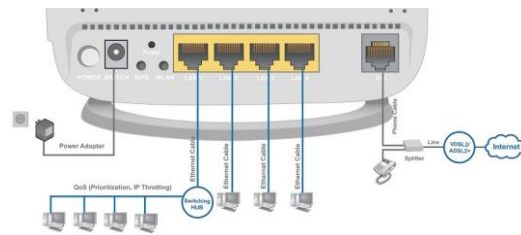
The BiPAC 8400N(E)(X)L R2 fully supports IPv6 (Internet Protocol Version 6), launched as the current IPv4 range is filling up, and IPv6 is gradually becoming the indispensable addressing system for savvy cloud computing users. Dual stack means the router is capable of running IPv4 and IPv6 in parallel during the transition period. With Billion IPv6 enabled devices, three major transition mechanisms such as IPv4/IPv6 Dual-Stack, DS-Lite, and 6RD are supported to be adapted easily into service provider's IPv4/IPv6 network. ^{*1}

*Ideal for
SOHO and
Residential
Users*

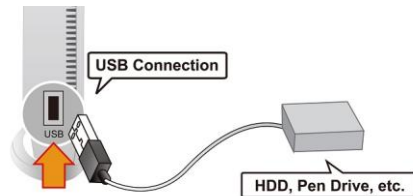
- Very High-speed Internet access via VDSL2; Auto fallback to ADSL2+
- VDSL2 profiles: 8a/b/c/d, 12a/b, 17a, 30a
- Gigabits EWAN for connecting to Cable/Fibre modem device (BiPAC 8400NEXL R2 only)
- 4-port 10/100Mbps Fast Ethernet switch
- Supports 802.11n Wi-Fi access point with WPA-PSK/ WPA2-PSK
- WPS (Wi-Fi Protected Setup) for easy setup
- Wireless speed up to 300Mbps and 3 times the coverage of standard 802.11g
- Quality of Service control for traffic prioritization
- SOHO firewall security with DoS prevention and packet filtering
- Universal Plug and Play (UPnP) compliance
- Dynamic Domain Name System (DDNS)
- Ease of use with Quick Installation Wizard
- USB 2.0 supports storage/NAS (BiPAC 8400N(E)(X)L R2 only)
- Supports IPv6^{*1}
- Supports TR-069 (CWMP)^{*1}



BiPAC 8400NEXL R2



BiPAC 8400N(X)L R2



BiPAC 8400N(E)(X)L R2 Application Diagram

Features & Specifications

VDSL / ADSL Compliance

- Compliant with xDSL standard
 - ITU-T G.993.2 (VDSL2)
 - ITU-T G.998.4 (G.inp)
 - ITU-T G.993.5 (G.vector)
 - 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.997.1
- Supports VDSL2 band plan: 997 and 998
- Supports VDSL2 profiles: 8a, 8b, 8c, 8d, 12a, 12b, 17a and 30a
- Supports Annex A, I, J, M & L
- Supports ATM and PTM modes
- Supports PTM-TC (Packet Transfer Mode – Transmission Convergence) for Ethernet packets (IEEE EFM 802.3ah)

Network Protocols and Features

- PPPoE (RFC 2516), PPPoA (RFC 2364), DHCP Client, Static IP
- IPv4, IPv6, IPv4/IPv6 Dual Stack^{*1}
- DS-Lite and 6RD^{*1}
- NAT, Static Routing and RIP v1/v2
- 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
- MAC Filtering, IP Filtering, URL Filtering
- VPN (IPSec, PPTP and LT2P) pass-through

Quality of Service Control

- Traffic prioritization management based on MAC address, IP address, Protocol and Port number

IPTV Applications^{*2}

- Virtual LAN (Interface Grouping)
- Quality of Service (QoS)
- IGMP Proxy and Snooping
- MLD Proxy and Snooping

Wireless LAN

- Compliant with IEEE 802.11n, 802.11g and 802.11b standards
- 2.4GHz frequency band
- 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
- Wireless clients isolation

USB Application (BiPAC 8400N(E)XL R2 only)

- USB storage/NAS: FTP and SAMBA server

Management

- Quick installation wizard
- Web-based GUI for remote and local management
- Web GUI permission
- Firmware upgrades and configuration data upload and download via web-based GUI
- Supports DHCP server/relay/client(WAN port)
- TR-069 (CWMP) supports remote management^{*1}
- Supports SNMP
- Diagnostic tool

Hardware Specifications

Physical Interface

- DSL: 1 x VDSL2/ ADSL2+ fallback port
- Gigabits EWAN: 1 x Gigabits Ethernet port (BiPAC 8400NEXL R2 only)
- Ethernet LAN: 4-port 10/ 100Mbps auto-crossover (MDI/MDI-X) switch
- WLAN: 2 x internal antennas
- USB 2.0 Type A Host (BiPAC 8400N(E)XL R2 only)
- Factory default reset button
- Wireless on/off
- WPS push button
- Power jack
- Power switch

Physical Specifications

- Dimensions: 5.91" x 5.71" x 1.97" (150mm x 145mm x 50mm)

Power Requirements

- Input: 12V DC, 1A

Operating Environment

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

Notes:

- Only upon request for Telco/ISP tender projects.
- IPTV application may require subscribing to IPTV services from a Telco/ISP.
- Specifications in this datasheet are subject to change without prior notice.