BILLION ™

BiPAC 7300NX *R4*

Wireless-N 300Mbps ADSL2+ Firewall Router

Ideal for SOHO and Residential Users

Express Internet Access

Complying with worldwide ADSL standards, the BiPAC 7300NX *R4* supports downstream data transmission rates up to 12/24 Mbps with ADSL2/2+, 8 Mbps with ADSL, and performs at upstream rates of up to 1 Mbps. Moreover, the BiPAC 7300NX *R4* includes Annex M technology that supports the latest ADSL2/2+ standard for higher upload speeds by increasing the upstream operation rate to approximately 2.5Mbps (up to 3Mbps under ideal conditions). With this technology, you can enjoy even higher-speed broadband multimedia applications such as interactive gaming, video streaming and real-time audios that run faster and easier than ever.

Robust Security and Smooth Data Transmission

The NAT default firewall has an advanced anti-hacker pattern-filtering protection feature - Denial of Service (DoS) that can automatically detect and block hacker attacks. In addition, packet filtering features provides high-level security for access control. With Stateful Packet Inspection (SPI) feature, the router enables users to determine whether a data packet is allowed to pass through the firewall to the private LAN.

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.

Easy Network Management

The web-based user interface of the BiPAC 7300NX *R4* 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 7300NX *R4* supports multi-functional USB 2.0 ports. You can connect a 3G/4G-LTE USB modem to its built-in USB ports, allowing you to watch movies, download music or access e-mail no matter where you are. BiPAC 7300NX *R4* also support SAMBA and FTP server. You can share movie, music and files via embedded SAMBA or FTP server with your family throughout your home network.

IPv6 Ready - Pathway to the Future

The BiPAC 7300NX *R4* 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, DS-Lite and 6RD are supported to be adapted easily into service provider's IPv4/IPv6 network.[*2]

- IPv6 ready (IPv4/IPv6 dual stack)
- DS-Lite and 6RD[*2]
- Wireless-N AP with Wi-Fi Protected Access (WPA-PSK/WPA2-PSK) and Wired Equivalent Privacy (WEP)
- Multiple wireless SSIDs with wireless guest access and client isolation
- High speed Internet access with ADSL2/2+
- With 4-port Ethernet switches
- SOHO firewall security with DoS prevention and SPI
- Universal Plug and Play (UPnP)
- Supports Virtual Private Network (VPN) pass-through
- Quality of Service control
- Dynamic Domain Name System (DDNS)
- USB 2.0 supports 3G/4G-LTE modem and storage/NAS
- Easy network management (Quick Start Wizard and Web GUI permission)
- Supports IPTV application[*3]
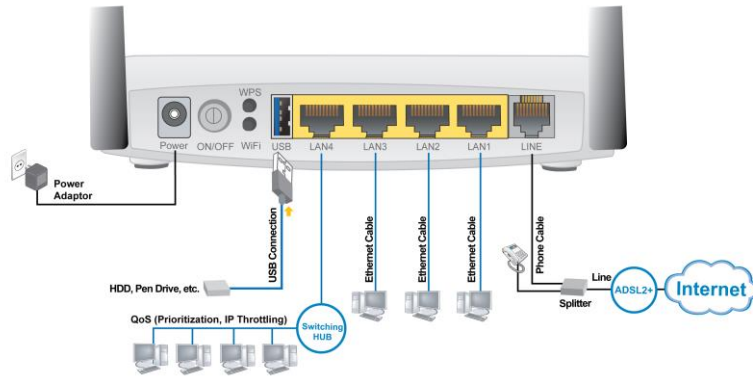
▲ **BiPAC 7300NX *R4* application diagram**

Features & Specifications

ADSL Compliance[*1]
- Compliant with ADSL2+ standards
  - G.dmt.bis plus (ITU G.992.5)
  - ADSL2+ Annex M (ITU G.992.5 Annex M)
- Compliant with ADSL2 standards
  - G.dmt.bis (ITU G.992.3)
  - ADSL2 Annex M (ITU G.992.3 Annex M)
- Compliant with ADSL standards
  - 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)
- Support G.inp (ITU G.998.4)

ATM Protocols
- ATM Adaptation Layer Type 5 (AAL5)
- Multiple protocol over AAL5 (RFC 2684, formerly RFC 1483)
- VC-MUX and LLC multiplexing
- Bridged or Routed Ethernet encapsulation
- OAM F4 / F5 loopback
- ATM QoS: UBR, CBR, VBR-rt, VBR-nrt

Network Protocols and Features
- PPPoE (RFC 2516), PPPoA (RFC 2364), DHCP Client, Static IP
- IPv4, IPv6, IPv4/IPv6 Dual Stack
- DS-Lite and 6RD[*2]
- NAT, Static Routing and RIP-1/ 2
- Virtual Server and DMZ
- SNTP, DNS proxy
- Universal Plug and Play (UPnP) compliant
- Dynamic Domain Name System (DDNS)
- IGMP Proxy and Snooping
- MLD Proxy and Snooping

Quality of Service Control
- Traffic prioritization management based on MAC address, IP address, Protocol and Port number

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
- Password protection for system management
- VPN pass-through

IPTV Application[*3]
- Virtual LAN (Interface Grouping)
- Quality of Service (QoS)
- IGMP Proxy and Snooping
- MLD Proxy and Snooping

Wireless LAN[*4]
- Based on Wireless-N technology, and compliant with 802.11g, 802.11b standards
- Up to 300 Mbps wireless operation rate
- 2.4 GHz - 2.484 GHz frequency range
- 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 client isolation

USB Application
- Supports 3G/4G-LTE USB modem
- USB Storage / NAS: FTP and SMABA server

Management
- Quick Start Wizard
- Web-based GUI for remote and local management
- Web GUI permission
- Firmware upgrade and configuration data upload and download via web-based GUI
- Supports DHCP server / relay / client (WAN port)
- TR-069 (CWMP) support remote management[*5]
- Supports SNMP
- Diagnostic tool

Hardware Specifications
Physical Interface
- DSL: 1x ADSL port
- Ethernet: 4-port 10/100Mbps auto-crossover (MDI/MDI-X) switch
- USB 2.0 host port
- Factory default reset button
- Wireless on/off and WPS button
- Power jack
- Power switch
- WLAN: 2x2dBi detachable antennas (5dBi antennas optional)

Physical Specifications
- Dimensions: 5.87" x 4.25" x 1.42" (149mm x 108mm x 360mm)

Power Requirements
- Input: 12V DC 1A

Models & Supported Standards
- BiPAC 7300NX *R4*: Supports Annex A and Annex M (Annex A and Annex M: ADSL over POTS)

Operating Environment
- Operating temperature: 0℃ - 40℃
- Storage temperature: -20℃ - 70℃
- Humidity: 20% - 95% non-condensing

Notes:
1. This router may require firmware modification for certain ADSL2/2+/Annex M DSLAMs.
2. Only upon request for Telco/ISP tender projects.
3. IPTV application may require subscribing to IPTV services from a Telco/ISP.
4. Actual throughput and performance depends on the environment.
5. Only upon request for Telco/ISP Project.
6. Specifications on this datasheet are subject to change without prior notice.

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