

300
Mbps
data rate

Fail Over

N
802.11n

ViBE
enabled



BILLIONTM

Wireless speed up to 300Mbps and
3X the coverage of standard 802.11g



3G
HSDPA
Wireless
300
Mbps
data rate
USB

Billion V7300NX

Wireless-N ADSL2+ Router with 3G Failover* and embedded ViBE client

(*3G Modem not included)

Complying with worldwide ADSL standards, the Billion V7300NX 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. The Billion V7300NX 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). Using the integrated USB 2.0 ports, the device allows you to share a blistering fast wired or 3G-based wireless Internet connection with multiple computers or laptops. With the Billion V7300NX, you can easily download photos, stream High Definition (HD) video files, run media-intensive applications, watch movies or share files with your clients, team members, friends or family. The router can even function as a FTP server for sharing files over the network.

Ultimate 3G Mobility and Flexibility

The Billion V7300NX offers a USB port for connecting to a 3G / HSDPA USB modem, enabling you to use a 3G / HSDPA, UMTS, EDGE, GPRS, or GSM Internet connection, making downstream rates of up to 14.4 Mbps possible. The auto fail-over feature ensures maximum connectivity and minimum interruption by quickly and smoothly connecting to a 3G network in the event your ADSL line failing. This feature allows the V7300NX to automatically reconnect to the ADSL connection when it's restored, reducing connection costs.

High End Security - Providing Peace of Mind

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

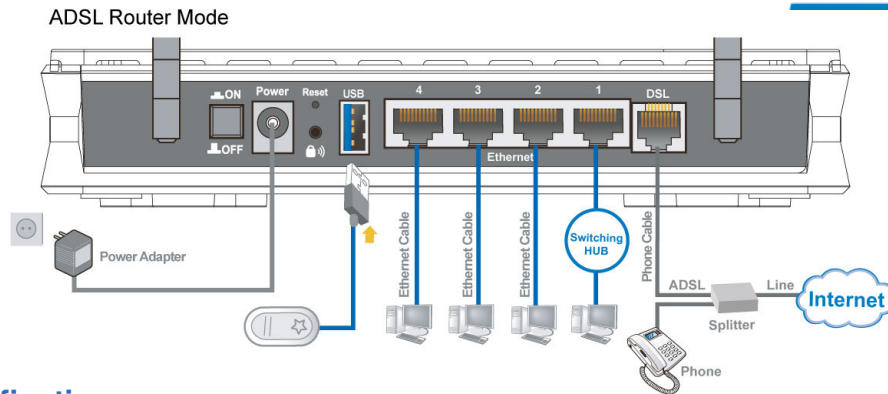
ViBE enabled**

ViBE is a VPN protocol developed by Voipex UK. It delivers unprecedented performance in data QoS and voice multiplexing, and offers a high performance and intelligent alternative to mainstream VPN technologies. ViBE VPN technology enables a staggering 3 times the amount of G.729 VOIP calls as compared to G.729 VOIP calls over WAN connection mediums without ViBE and with the same capacity. This is due to the ingenious multiplexing function that ViBE offers. ViBE furthermore offers automatic VOIP quality of service (QoS) which saves the end user from tedious and complicated IP SLA setups. The automatic VOIP QoS ensures that general internet traffic never interferes with the timeous and precise delivery of your VOIP data packets. ViBE further adds the ability to prioritise data traffic based on protocol, IP and port numbers.

**All traffic must be within the ViBE VPN tunnel to ensure maximum performance. Any traffic outside of the ViBE VPN tunnel will not have the benefits of ViBE applied and may affect the overall ViBE VPN tunnel performance.

- Dual-WAN approach – ADSL2+ and 3G connections
- USB 2.0 port for connecting a 3G / HSDPA modem as backup (available from your service provider)
- Storage feature through USB 2.0 port: FTP server, samba server
- 1x USB 2.0 port for multiple functions: 3G network, FTP server, and samba server.
- Auto fail-over feature to ensure an always-on connection
- High-speed wireless connection up to 300Mbps
- 802.11n Wireless Access Point with Wi-Fi Protected Setup (WPS), Wi-Fi Protected Access (WPA-PSK / WPA2-PSK) and Wired Equivalent Privacy (WEP) support
- Wireless on/off time schedule control
- High speed Internet access with ADSL2 / 2+; also compatible with ADSL
- Integrated with 4-port Ethernet switch
- SOHO firewall security with DoS prevention and SPI
- Universal Plug and Play (UPnP) compliant
- Supports Virtual Private Network (VPN) pass-through
- ViBE Quality of Service
- Dynamic Domain Name System (DDNS)
- Supports IPTV application*5

Powering communications
with Security



Features & Specifications

ADSL Compliance

- 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)
 - ADSL over ISDN / U-R2
- Compliant with ADSL2 standards
 - G.dmt.bis (ITU G.992.3)
 - ADSL2 Annex M (ITU G.992.3 Annex M)
 - (•Compliant with ADSL2+ standards
 - G.dmt.bis plus (ITU G.992.5)

Network Protocols and Features

- NAT, static routing and RIP-1 / 2
- Universal Plug and Play (UPnP) compliant
- Transparent bridging
- Dynamic Domain Name System (DDNS)
- Virtual Server and DMZ
- SNTP, DNS relay and IGMP proxy
- IGMP snooping for video service
- Management based-on IP protocol, port number and address
- SMTP client

Firewall & Virtual Private Network (VPN)

- Built-in NAT firewall
- Stateful Packet Inspection (SPI)
- Prevents DoS attacks including Land Attack and Ping of Death, etc.
- Remote access control for web base access
- Anti probe function
- Packet filtering, MAC filtering, URL content filtering
- Password protection for system management

Quality of Service Control

- By default, ViBE manages all QoS inside the ViBE tunnel
- VoIP traffic always receives ultimate priority

IPTV Applications^{*5}

- GMP Snooping
- Virtual LAN (VLAN)
- IGMP snooping & IGMP proxy

Wireless LAN

- Compatible with IEEE 802.11n, 802.11g and 802.11b standards.
- Up to 300Mbps wireless operation rate^{*2}
- 2.4 GHz–2.484 GHz frequency range
- WPS (Wi-Fi Protected Setup) for easy setup.
- 64 / 128 bits WEP supported for encryption
- Wireless Security with WPA-PSK / WPA2-PSK support
- 802.1x radius supported
- WDS repeater function support
- WLAN on/off time schedule control

USB Application Server

- 3G network sharing
- Storage: FTP server, samba server

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)
- MAC Encapsulated Routing (RFC 1483 MER)
- OAM F4 / F5

Management

- Web-based GUI for remote and local management
- Firmware upgrades and configuration data transfer via web-based interface
- Embedded Telnet server for remote and local management
- TR-069^{*4} supports remote Management
- Available syslog
- Supports DHCP server / client / relay
- SNMP v1 / v2 /v3 MIB supported

- Wake on LAN

- Mail alert for WAN IP changed, IDS, failover / failback management

Hardware Specifications

Physical Interface

- DSL: ADSL port
- Ethernet: 4-port 10/100M auto-crossover (MDI / MDI-X) switch
- USB 2.0 supports 3G / HSDPA modem backup
- Factory default reset button
- WPS push button
- Power jack
- Power switch
- WLAN: 2 antennas

Physical Specifications

- Dimensions: 7.28" x 4.86" x 1.42"
(185mm x 123.5mm x 36mm)

Power Requirements

- Input: 12V DC, 1.2A

Operating Environment

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

Compatible 3G USB modems^{*3}

3G Brand	3G Model
ZTE	K3565-Z, K3570-Z, K3805-Z, K4505-Z
Huawei	E153u-2, E173u-2, E220, E367u-2, E1820
Vkom	301USB & 301USB Dual Band, 303USB

This list is continuously updated at: <http://www.billionsa.com/compatible-3G.html>

Notes:

1. This router may require firmware modification for certain ADSL2 / 2+ / Annex M DSLAMs.
2. Actual throughput and performance depends on the environment. Normally, the wireless speed is faster if you are closer to the router. The farther from the router you are, the less the wireless range, and the speed will be slower.
3. The 3G / HSDPA data rate depends on your local service provider and your 3G / HSDPA modem. Please visit www.billionsa.com for an updated / extended list of compatible 3G USB modems.
4. Requires customized firmware and only upon special request with minimum order quantities applicable.
5. IPTV application may require subscribing to IPTV services from a Telco / ISP