

## Compatible 3G USB Modems\*4

Brand	Model
Onda	MT503HS 7.2MEGA
Novatel	MC950D
Sierra Wireless	AirCard 875U
Sierra Wireless	AirCard 880U
Huawei	E220
Option	iCON 225

## Compatible 3G Data Cards\*2

3G Operator	Product name	Manufacturer & Model name
T-Mobile	web'n walk card compact	Option GlobeTrotter GT Max E
T-Mobile	web'n walk card compact II	Option GX0201
T-Mobile	web'n walk card wlan	Option GT Fusion+EMEA
T-Mobile	Mobile DSL 1800	Option GlobeTrotter HSDPA
Vodafone/ Vodacom	Mobile Connect	Huawei E630 Huawei E620 Option GT 3G+EMEA Novatel Merlin U740
N/A	N/A	Novatel Merlin XU870 (EXPRESS to PCMCIA converter required)
N/A	N/A	Option GlobeTrotter EXPRESS 7.2 GE0201 (EXPRESS to PCMCIA converter required)
N/A	N/A	ONDA N501HS
N/A	N/A	Bandrich C100 (EXPRESS to PCMCIA converter required)
Telstra	Telstra Turbo 7 series Express Card (AC880E)	Sierra Wireless Aircard 880E (EXPRESS to PCMCIA converter required)
N/A	N/A	HuaWei E600
N/A	N/A	Sierra Wireless Aircard 875
N/A	N/A	Sierra Wireless Aircard 880
N/A	N/A	Huawei E870 (EXPRESS to PCMCIA converter required)
N/A	N/A	Novatel Merlin X950D (EXPRESS to PCMCIA converter required)
N/A	N/A	Globtrotter GT MAX 7.2 card
N/A	N/A	Option GlobeTrotter GT Max HSUPA

Above list will be continuously updated at <http://www.billion.com/compatible-3G.html>.

## Benefits

### Communication Flexibility via 3G/HSDPA

The BiPAC 7300GX router allows you to insert a 3G/HSDPA PC card to its built-in PC Card slot, enabling you to use a 3G/HSDPA, UMTS, EDGE, GPRS, or GSM Internet connection, makes downstream rates of to 14.4Mbps\*2 possible. With the increasing popularity of the 3G standard, communication via the BiPAC 7300GX is becoming more convenient and widely available - allowing you to watch movies, download music on the road, or access e-mail no matter where you are. You can even share your Internet connection with others, no matter if you're in a meeting, or speeding across the country on a train.

### Always Online

The BiPAC 7300GX is compliant with worldwide ADSL standards, and supports download rates of up to 12/24Mbps using ADSL2/2+, 8Mbps using ADSL and an upload rate of up to 1Mbps. Using this technology you'll be able to enjoy high-speed ADSL and broadband multimedia applications such as interactive gaming, video streaming and real-time audio. The integrated Annex M standard supports ADSL2/2+ for higher upload speeds by doubling the upload data rate. Planned support for auto fail-over means that you'll be assured of a constant Internet connection - in case your ADSL line fails, the BiPAC 7300GX will connect via 3G to deliver uninterrupted connectivity.

### Double-layer Protection

An integrated 802.11g Wireless Access Point offers quick yet easy access with data encryption for added security. Wireless Protected Access (WPA-PSK/WPA2-PSK) and Wireless Encryption Protocol (WEP) support ensures high-level data protection and WLAN access control. In addition, rich firewall security features such as SPI, DoS attack prevention and URL content filtering are integrated to provide unparalleled protection for Internet access. Enjoy the benefits of added security by simply pressing the Wi-Fi Protected Setup button to quickly and easily set up secure wireless communication.

## 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) (Available on BiPAC 7300GXA only)
- Compliant with ADSL2+ Standard
  - G.dmt.bisplus (ITU G.992.5)
  - ADSL2+ Annex M (ITU G.992.5 Annex M) (Available on BiPAC 7300GXA only)

### Network Protocols and Features

- NAT, static routing and RIP-1/2
- NAT supports PAT and multimedia applications
- Transparent Bridging
- Dynamic Domain Name System (DDNS)
- SNTP
- DDNS relay
- Virtual Server and DMZ
- Virtual LAN (VLAN)

### Firewall & Virtual Private Network (VPN)

- Built-in NAT Firewall
- Stateful Packet Inspection (SPI)
- Prevents DoS attacks including IP spoofing, land attack, Smurf attack, ping-of-death, etc.
- Remote access control for web base access
- Packet Filtering
- URL Content Filtering
- Password protection for system management
- VPN pass-through

### Wireless 802.11g

- Compliant with IEEE 802.11g and 802.11b standards
- 2.4GHz - 2.484GHz frequency range
- Up to 54Mbps wireless operation rate
- 64-/128-bit WEP supported for encryption
- Auto channel select
- Wireless Security with WPA-PSK/WPA2-PSK support
- Wireless Distribution System (WDS) repeater function supported
- Wi-Fi Protected Setup

### Operating Environment

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

### ATM and PPP Protocols

- ATM Adaptation Layer Type 5 (AAL5)
- Multiple protocols 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)
- OAM F4/F5

### Management

- Quick Installation Wizard and Auto ADSL settings
- Web-based GUI for remote and local management
- Firmware upgrade and configuration data upload and download via web-based GUI
- Embedded Telnet server for remote and local management
- Available Syslog monitoring
- Supports DHCP server/client/relay
- Mail Alert

### Quality of Service Control

- Supports DiffServ approach
- Traffic prioritization and bandwidth management based-on IP protocol, port number and address

### Hardware Specifications

#### Physical Interface

- DSL: ADSL Port
- Ethernet: 4-port 10/100Mbps auto MDI/MDI-X Switch
- WLAN: one 2 dBi detachable antenna
- 3G/HSDPA PC Card Slot: for a mobile broadband data card
- Compatible with 3G USB Modems (USB to PCMCIA converter required)
- WPS button: for WPS Push Button Configuration
- Factory default reset button
- Power jack
- Power switch

#### Physical Specifications

- Dimensions: 8.27" x 5.83" x 1.42"  
(210mm x 148mm x 36mm)

#### Power Requirements

- Input: 12V DC, 1A
- Car power cable

### Models & Standards Supported

- BiPAC 7300GXA: Annex A and Annex M
- BiPAC 7300GXU: U-R2 and Annex B
- Annex A and Annex M: ADSL over POTS
- Annex B and Annex U-R2: ADSL over ISDN

#### \*Notes:

- The router may require firmware modification for certain ADSL2/2+ Annex M DSLAMs.
- The 3G/HSDPA data rate is dependent on your local service provider and your 3G/HSDPA card and USB modem.
- Specifications in this datasheet are subject to change without prior notice.
- Compatible with 3G USB Modems (USB to PCMCIA converter required)

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### Billion Electric Co., Ltd.

8F, No.192, Sec.2, Chung Hsing Road,  
Hsin Tien City, Taipei County, Taiwan

TEL : +886-2-2914-5665

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

E-mail : sales@billion.com

[www.billion.com](http://www.billion.com)

# Connect anywhere, anytime!



## BiPAC 7300GX

### 3G/ADSL2+ Wireless Router

### Mobile - Secure - Always online

- 3G/ADSL for true always-on connectivity
- Mobility assured by 3G support
- Automatically switch between ADSL and 3G as needed
- Car power cable for ultimate portability

## 3G/ADSL2+ Wireless Router

Enjoy the freedom of secure, high-speed Internet connectivity at the home, office, or while on the road with Billion's compact BiPAC 7300GX dual-interface ADSL2+/3G firewall and router. Wired connections can benefit from the ADSL2+ standard's flexibility, offering download speeds of up to 24Mbps using a standard telephone connection, while wireless connections profit from download speeds up to 14.4Mbps\*\* delivered via 3G/HSDPA, EDGE, UMTS or GPRS.

The BiPAC 7300GX is equipped with a built-in 4-port full-duplex 10/100 Switch to allow easy connecting of other wired-Ethernet devices. Directly connect up to four PCs or additional hubs or switches to create a larger network as needed. Use the integrated Router function to share a blistering ADSL2+ or 3G-based Internet connection (requires an additional 3G data card or USB modem), with automatic fail-over to ensure an always-on Internet connection in the event that one of your Internet services fails.

A 12V car power cable is bundled with the router to let you plug the adapter into your car's cigarette lighter for mobility. The BiPAC 7300GX can also encode all 802.11g wireless LAN transmissions with WEP or WPA encryption to ensure that your data is protected, and boasts a DHCP Server and a powerful SPI firewall to protect against intruders and most known Internet attacks. Secure WLAN setup is simplified by the web browser-based configuration for easy access to the Internet wherever a 3G connection is available - whether you're seated at your desk or taking a cross-country train trip.

### Key Features

- Dual WAN interfaces for ADSL2+ and 3G connection
- Auto fail-over feature to ensure an always-on connection
- 12V car power cable included for ultimate mobile connectivity
- High-speed Internet access with ADSL2+/2+; backward compatible with ADSL
- One PC Card slot for inserting a 3G/HSDPA PC data card (Available from your service provider)
- 802.11g Wireless AP with WPA-PSK/WPA2-PSK support
- Wi-Fi Protected Setup feature makes setting up a secure network quick and easy
- Easy Sign-On (EZSO) and Web-based Configuration
- SOHO firewall security with DoS prevention and SPI
- Quality of Service control
- Compatible with 3G data cards and USB modems\*4 provided by operators such as Vodafone, T-Mobile and many others

### Ideal for:

- home users
- office users
- event or meeting organizers
- public transport operators:  
e.g. long-distance bus operators

## Applications over 3G/ADSL networks



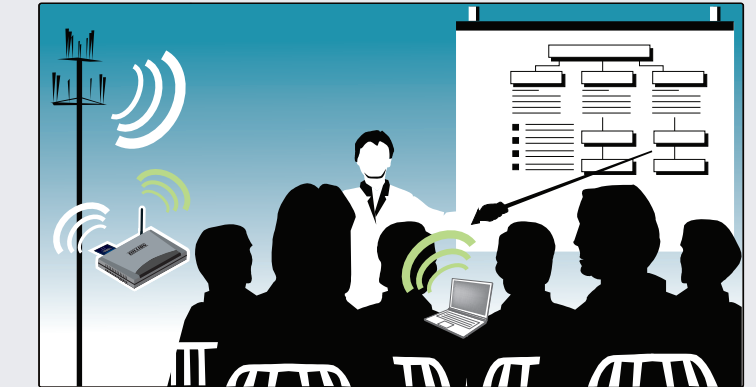
### At the desk

Enjoy all the benefits of a high-speed ADSL connection right at your desk with the BiPAC 7300GX, offering a secure computing experience, with an integrated SPI firewall, DoS prevention and other robust security features.



### Always-On connection

The BiPAC 7300GX's auto fail-over feature ensures maximum connectivity and minimum interruption by quickly and smoothly connecting to a 3G network in the event that the landline fails. The BiPAC 7300GX will then automatically return to the ADSL connection when it's restored - reducing connection costs. These features are perfect for office situations where a constant connection is paramount.



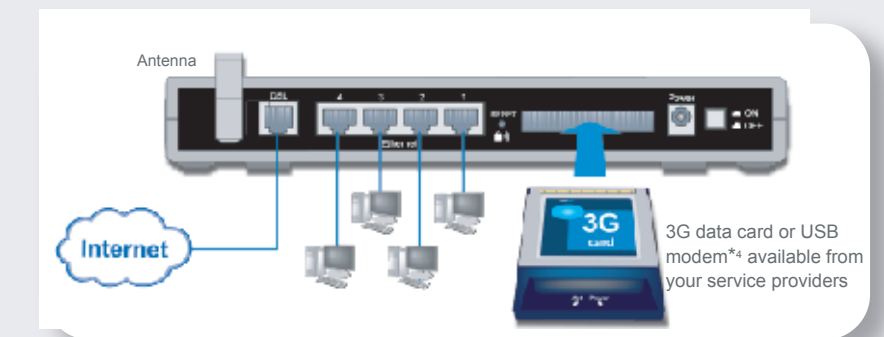
### In a meeting

The BiPAC 7300GX's innovative browser-based configuration allows you to quickly and easily set up a WLAN, so when you're at a meeting or training, your guests or participants can quickly and securely access the Internet via a 3G network to retrieve emails, share meeting minutes or training materials with their colleagues.

### What is 3G?

3G is the common name for third-generation digital mobile technology. It offers consistent connectivity services delivered via 3G/HSDPA, EDGE, or UMTS mobile telephony protocols.

Compared to 1G (analog wireless technology) and 2G (digital radio wireless technology such as GPRS), 3G offers faster data transfer rates up to 14.4Mbps\*\*.



### In a car

The included 12V car power cable allows you to connect to the Internet whilst in your car - so you can keep the children entertained on a long road trip, or refer to online mapping sites when you need to be somewhere you're not familiar with.



### On public transport

By installing the BiPAC 7300GX, public transport operators can update passengers with real-time weather and event information, updated regularly via a 3G Internet connection, or offer business travelers Internet access that can be billed to create greater income potential.



### At an event

When you're chilling out at a party or concert, the light-weight, portable BiPAC 7300GX frees you to instantly share your pictures or video clips of the event with friends and family -- so those close to you can share your joy.