



## BiPAC 2094 R2

### HD200 Powerline Wall Plug Ethernet Adapter with AC-Pass through Power Socket

#### Extends a high-speed Internet connection to any power outlet

By simply plugging one PowerLine adapter into an existing electrical socket, you can turn every power outlet into a potential network connection. The BiPAC 2094 R2 is compliant with the latest DS2 HD200 Standard and with data transmission rate of up to 200Mbps, also be interoperable with G.hn standard in the future, with AC Pass-through power socket of noise filtering is a handy add-on. It offers users an extra electrical outlet to enhance power usage in residential applications while ensuring the data signal is transmitted smoothly. The BiPAC 2094 R2 is a great networking solution for connecting different devices such as modems, routers, PCs, set-top-boxes, IP Cameras, and game consoles using existing power cables. This allows users to share multimedia applications such as online games, IPTV and audio streaming with family all around the house. Its unique Smart Power Saving technology can automatically detects the link status of connected devices and adjusts its power consumption to enhance power efficiency, thus saving money on electricity bills. Smart Route technology ensures access point always through the best transmission path. Smart Repeater technology enhances the connection status as the best performance.

#### Interoperable with G.hn standard

The BiPAC 2094 R2 is compliant with the latest DS2 HD200 standard, the data transmission rate is up to 200Mbps, interoperable with G.hn universal standard to deliver the benefits of high-speed, reliability and security. With support G.hn standard, The BiPAC 2094 R2 is perfect for triple play applications such as IPTV, VoIP and high-speed Internet access, lead users to step into the whole new digital home life.

#### Extra noise-free AC Pass-through power socket

The BiPAC 2094 R2 features a built-in electrical power socket with noise filter - AC Pass-through power socket. This handy add-on offers users an additional power extension for other electrical devices with limited wall outlets nearby. However, the appliances which use power line as communications medium will also contribute noise to it. With noise filtering, the BiPAC 2094 R2 enhances power-line communications coverage within the home when the AC Pass-through power socket is used by the appliance.

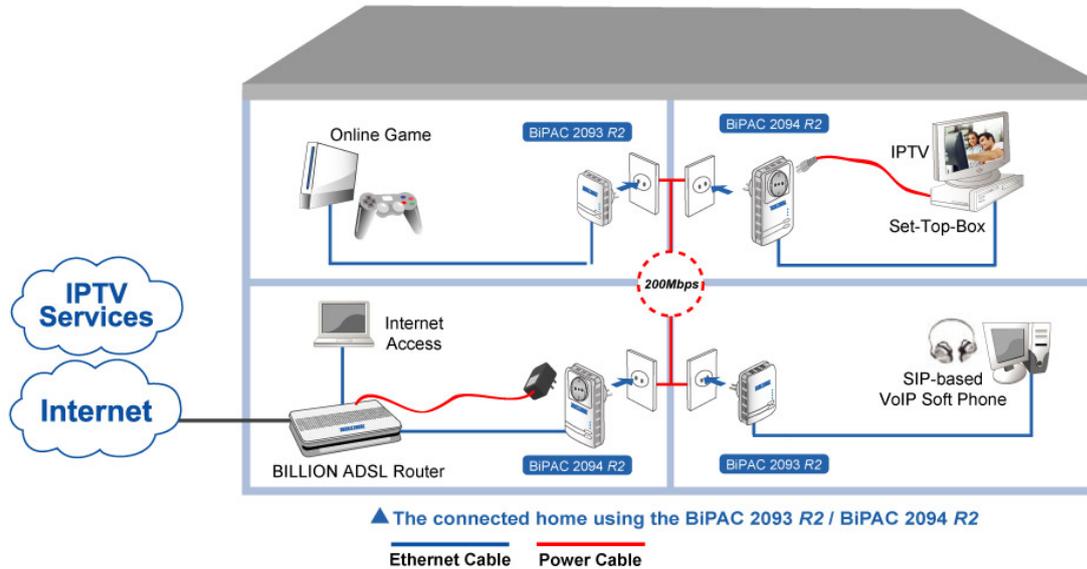
#### Provide users with smart lifestyle

With unique Smart Power Saving technology, the BiPAC 2094 R2 can automatically detect its Ethernet connection. When an Ethernet-based device is powered down or disconnected, the BiPAC 2094 R2 adapter will automatically fall into sleep mode, actually save money on your electricity bills. Furthermore, the built-in Smart Route technology helps to finds the best transmission path to keep premium performance, the built-in Smart Repeater technology extends connection coverage and improves connection performance.

#### Smooth Traffic and Prioritization

Quality of Service (QoS) control guarantees the transmission quality by automatically prioritizing data. The BiPAC 2094 R2 will automatically recognize the bandwidth needs of voice and video applications. QoS prioritizes the data in order to guarantee optimal transmission quality. TV and video images are received and displayed with absolute smoothness. QoS also guarantees clear and instant transmission of voice data, even when other applications are running on the network at the same time. QoS makes your network a pleasure to use.

- Interoperable with G.hn standard
- Provides high-speed data transfer of up to 200Mbps via electrical wiring
- Enable data transmission through existing home power grid
- Provides a noise-filtered power socket with AC Pass-through
- Smart power saving technology for improved power efficiency
- Smart Route for the best transmission path
- Smart Repeater for increased connection coverage
- Utilizes Quality of Service control
- Supports Triple Play applications such as IPTV, VoIP and high-speed Internet access
- Supports 1x 10 / 100 Base-T Ethernet port
- Utmost slim and light design
- Ideal for residential users



## Features & Specifications

### Protocols

- TDMA

### Standards

- Ethernet specifications: IEEE 802.3, IEEE 802.3x, IEEE 802.3u, Auto MDI / MDIX

### Transmission Speed

- 200Mbps max.

### Modulation

- Supports OFDM
  - 1536 carriers, 1024 / 256 / 64 / 16 / 8
- QAM, QPSK, and BPSK

### Frequency Range

- 2MHz ~ 30MHz

### Security

- Programmable 128-bit AES, 256-bit AES and 3DES hardware encryption

### Smart Transmission

- Smart Route for the best transmission path
- Smart Repeater for increased connection coverage
- Video optimization for IPTV service or media player

### Quality of Service Control

- Enhancements: contention-free access, seven-level priority based contention access, and multi segment bursting
- Port Number Packet Classifiers
- Supports IGMP managed multicast sessions
- QoS classification for quasi-error-free delivery
  - VLAN priority field, IP Field, TCP port Field, UDP port Field

- Enhanced IPv4/IGMPv1-3 snooping support
- Supports IPv6 and MLDv1-2 snooping

### Supported Operating Systems

- Windows 2000 / XP / Vista / 7
- Other 10 / 100 Base-T Ethernet devices

### Power Supply Specifications

- Input: 100 ~ 240V AC, 50 ~ 60Hz
- Protection: OCP, OVP, SCP

### Smart Power Saving (\* depends on input power voltage)

- Up to 80% power reduction in standby mode

### Hardware Specifications

#### Physical Interface

- DS2 PLC processor
- AC power plug
- RJ-45 compatible
- Sync button
- Reset button
- AC outlet
- LED display:
  - STATUS
  - PLC
  - ETH

#### Physical Specifications

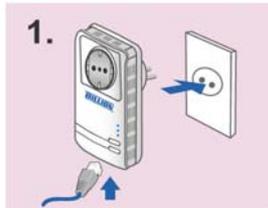
- Dimensions (W, D, H):
  - 5.47" x 2.44" x 3.05"
  - (138.3mm x 62mm x 77.48mm)

#### Operating Environment

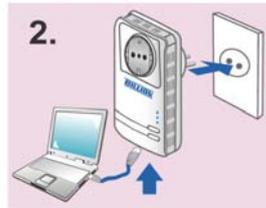
- Operating temperature: 0 ~ 40 °C
- Storage temperature: -20 ~ 70 °C
- Humidity: 20 ~ 95% non-condensing

### Connecting the BiPAC 2094 R2

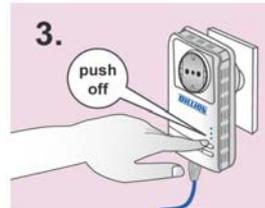
Connect a network cable to the adapter and then plug the BiPAC 2094 R2 into a power socket.



Then connect the BiPAC 2094 R2 to a laptop, modem, router or a set-top-box.



Create a secure network by a simply push off the "Sync" button.



\* Note: Plug/socket, power cable and input voltage/frequency may vary from country to country.

### \* Notes:

- IPTV application may require subscribing to IPTV services from a Telco/ISP.
- Future release
- Specifications in this datasheet are subject to change without prior notice