



Ideal for
residential and
SOHO users

Billion SG2095

Broadband PLC Ethernet Adapter with Remote Power On / Off Control

Power up your home networking!

Just plug the Billion SG2095 into any power outlet, connect a network cable, and data signals are automatically transmitted through the power lines. The Billion SG2095 can be used to bridge Ethernet devices such as modems, routers, PCs, set-top-boxes, and game consoles, enabling users to share network access via existing in-home power lines. Once plugged into an Ethernet port on a router, the Billion SG2095 allows people elsewhere in the house to share Internet access by using computers connected with a powerline network adapter. Compliant with the latest powerline AV standards which support data speeds of up to 200Mbps, the Billion SG2095 delivers the super-fast connectivity needed for High Definition home networks, enabling users to easily set up a data network accessible through a power socket and share bandwidth-consuming applications such as online games, IPTV and video-on-demand with family or friends all around the house.

Remote control on in-home electrical appliances

With built-in Smart AC Power Switching Control, the Billion SG2095 features remote power on / off that enables you to remotely control on your electrical home appliances by using a computer that is available for the Internet access when you're away from home. With this smart power on / off feature, you can remotely turn on your washing machine to wash the clothes and turn it off when the work is finished. You also can remotely switch on the air conditioner to cool your entire house when you are on the way home.

Energy Efficiency

Due to climate change, Green IT is becoming a big issue in current times. With the Smart Power Saving technology, the Billion SG2095 can automatically detect its Ethernet connection. When an Ethernet-based device is powered down or disconnected, the Billion SG2095 adapter will automatically fall into sleep mode, which reduces power consumption significantly. Furthermore, when the current usage is in full operation, the adapter can reduce its power consumption which in turn saves money on your electricity bill. Create a "Green" home with the Billion SG2095 and become more energy efficient!

No Extra Wiring Needed to Set Up an In-home Network

With the Billion SG2095, you can create a network with high-speed bandwidth to connect computers and game consoles without the need for further drilling or extra wires. Just plug-and-play to install the bridge utility and your high-speed network is ready. It's as easy as simply plugging in your Billion networking devices and using the power cables in your home.

Smooth Traffic and Prioritization

The Quality of Service (QoS) control guarantees the transmission quality by automatically prioritizing data. The Billion SG2095 will automatically recognize the bandwidth needs of voice and video applications. The QoS prioritizes the data in order to guarantee optimal transmission quality. TV and video images are received and displayed with absolute smoothness. It also guarantees clear and instant transmission of voice data, even when other applications are running on the network at the same time. This feature makes your network a pleasure to use.

Immunity from Noise and Intervention

Unlike other PLC devices, the Billion SG2095 supports superior and noise-immune data transmission over in-home electrical power lines. Even when your family turns on an electronic device or turns off a light, you won't experience any interruption to latency-sensitive applications such as multimedia or video being shared with your family in another room.

Outlet Rating (Maximum)



EU Outlet
(16A Max.)



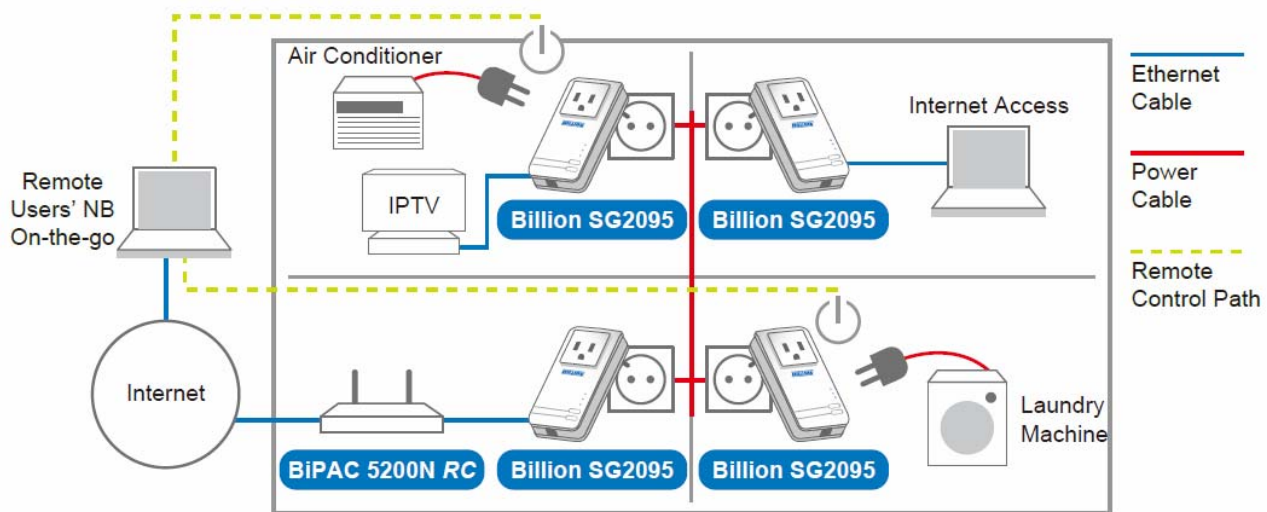
UK Outlet
(13A Max.)



US Outlet
(15A Max.)

- Provides high-speed data transfer of up to 200Mbps via electrical wiring
- Enables data transmission through existing home power grid
- Built-in Smart AC power switch control to remotely control the electrical home appliances such as laundry machine and air conditioner
- Smart power saving technology for improved power efficiency
- Utilizes Quality of Service control
- Supports Triple Play applications such as IPTV, VoIP and high-speed Internet access
- Supports 10/100 BaseT Ethernet
- Compliant with the UPA Alliance industry specifications
- Utmost slim and light design

Application Scenario



▲ The connected home using the Billion SG2095

Features & Specifications

Standards

- Ethernet specifications: IEEE 802.3, IEEE 802.3x, IEEE 802.3u, Auto MDI/MDIX
- UPA DHS and OPERA compatible

Transmission Speed

- 200Mbps max.

Modulation

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

Frequency Range

- 2MHz ~ 30MHz

Security

- 128-bit/256-bit AES Link Encryption with key management for secure power line communications
- Rotating NEK (Network Encryption Key)

Quality of Service Control

- Enhancements: contention-free access, eight-level priority based contention access.
- ToS, CoS Packet Classifiers

Supported Operating Systems

- Windows 98/98SE/Me/2000/XP/Vista
- Other 10/100 Base-T Ethernet devices

Device Port

- Ethernet RJ-45

Power Supply Specifications

- Input: 100~240V AC, 50~60Hz
- Protection: OCP, OVP, SCP
- AC outlet:
 - EU type : 250V~, 16A (max.)
 - UK type : 250V~, 13A (max.)
 - UL type : 125V~, 15A (max.)

Smart Power Saving

- Up to 80% power reduction in standby mode

Hardware Specifications

Physical Interface

- AC plug
- RJ-45 compatible
- Sync button
- Reset button
- AC outlet
- LED display:
 - POWER
 - 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

Note: All the specifications are subject to change without prior notice.
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