

BEC 2071 – HomePlug Ethernet Adapter



BEC 2071

HomePlug AV 200 Wall Plug Ethernet Adapter

Extend your home networking through power lines

Just plug the BEC 2071 into any wall power socket, connect a network cable, and data signals are automatically transmitted through the power lines. The BEC 2071 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 BEC 2071 allows people elsewhere in the house to share Internet access by using computers connected with a HomePlug compliant Powerline network adapter. Compliant with the latest HomePlug AV standards which support data speeds of up to 200Mbps, the BEC 2071 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.

Power saving

The BEC 2071 can automatically detect its Ethernet connection. If no Ethernet device is being used, the BEC 2071 will automatically go into sleep mode, which cuts power consumption by at least 60% increasing energy efficiency and saving money on your electricity bill.

No sweat to set up an in-home network

The BEC 2071 does not require the time and money needed to install expensive Ethernet cables throughout your house in order to share your home network. Nor does it require any drilling. Just one touch of the "Sync" button to install the bridge utility and your high-speed network is ready. It's as easy as simply plugging in your networking devices and using the electrical wiring in your home.

Smooth traffic and prioritization

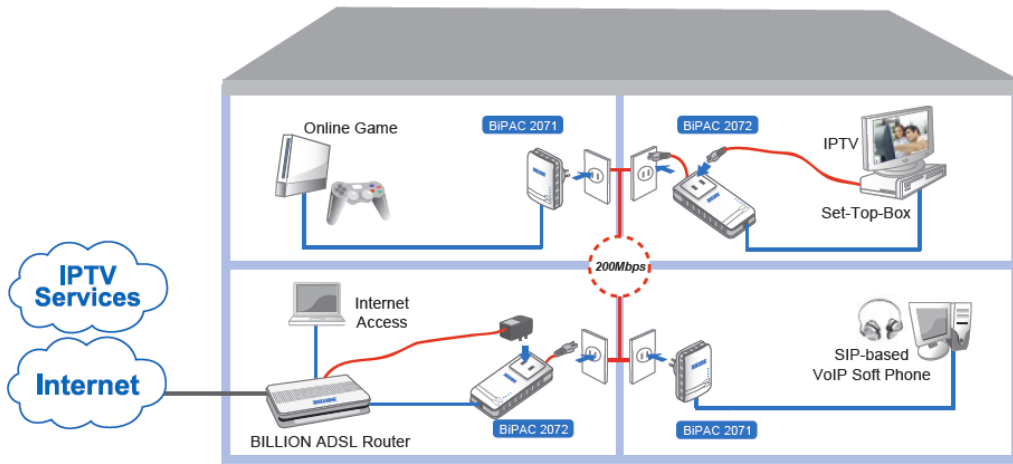
Quality of Service control guarantees the transmission quality by automatically prioritizing data. The BEC 2071 automatically recognizes the bandwidth needs of voice and video applications. QoS prioritizes the data to guarantee optimal transmission quality. TV and video images are received and displayed with absolute smoothness. QoS also guarantees clear, 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.

Immune to noise and intervention

Unlike others, the device supports superior and noise-immune data transmission over in-home electrical power lines. Even at the moment 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.

- Provides physical layer data rate of up to 200Mbps over existing in-home power lines
- Utilizes power line technology that takes advantage of the unused bandwidth of the electrical wiring in your home
- Reduces power consumption at least 60% with power saving feature
- 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 HomePlug Powerline Alliance industry specifications
- Ideal for residential users

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▲ The connected home using the BiPAC 2071/BiPAC 2072

Ethernet Cable **Power Cable**

Features & Specifications

Protocols

- TDMA, CSMA/CA

Standards

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

Transmission Speed

- 200Mbps max.

Modulation

- Supports OFDM
- 1155 carriers, 1024/256/64/16/8 QAM, QPSK, BPSK and ROBO

Frequency Range

- 2MHz ~ 30MHz

Security

- 128-bit AES Link Encryption with key management for secure power line communications
- Encryption:
 - NMK (Network Membership Key) used to authenticate/access
- Rotating NEK (Network Encryption Key)

Quality of Service Control

- Enhancements: contention-free access, four-level priority based contention access, and multi segment bursting
- ToS, CoS and IP Port Number Packet Classifiers
- Supports IGMP managed multicast sessions
- IGMP snooping with multicast to multiple unicast support in CSMA
- QoS classification for quasi-error-free delivery
 - VLAN priority field, ToS Field
- Enhanced IPv4/IGMPv1-3 snooping support
- Supports IPv6 and MLDv1-2 snooping

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

Power Saving

- Reduces power consumption at least 60% when no Ethernet device is connected

Hardware Specifications

Physical Interface

- AC power cable
- RJ-45 compatible
- Sync button
- Reset button
- AC outlet
- LED display:
 - 1.0 DET
 - POWER
 - PLC
 - ETH

Physical Specifications

- Dimensions (W, D, H): 4.42" x 3.05" x 1.75" (112.4mm x 77.4mm x 44.5mm)

Operating Environment

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

Available Product Package

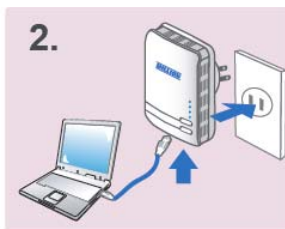
- BEC P104 HomePlug AV 200 Wall Plug Starter Kit
 - includes 2 x BEC 2071

Connecting the BEC 2071

Connect a network cable to the bridge and then plug the BEC 2071 into a power socket



Then connect the BEC 2071 to a laptop, modem, router or a set-top-box



Create a secure network by a simply push off the network sync button

