



BiPAC 2300

BPL Access Head-End Unit

Connects and transfers data over the electric grid from the backhaul to the customer's endpoints

BiPAC 2300 BPL Access Head-End Unit provides a cost-effective means of delivering broadband to a large group of users within one building. The Head-End can automatically deliver the broadband connection throughout the whole building via the electrical wiring. It works in even the hardest-to-reach building environment, and enables service providers to quickly and easily bring high-speed broadband access to business and residential customers in multi-dwelling units (MDUs) or multi-tenant buildings.

- 200Mbps physical connection bandwidth
- 10/100 Ethernet x 2
- AC power: 90-250VAC, 50/60Hz
- Ability to configure as a head-end master or a repeater
- Traffic control and isolation: VLAN/OVLAN
- 802.1D bridging protocol
- Up to 1024 MAC table size for multiple devices
- Up to 64 direct PLC connection
- DES and 3DES encryption
- QoS with 8 level priority queues
- 802.1P traffic priority classification
- Bandwidth limitation for each CPE
- Power mask management
- SNMP and web network management protocol
- Configurable bandwidth from 2 to 34MHz



BiPAC 2103

BPL Access End-Point Unit

Transform your home power cables into a high-speed computer network

BPL solution is a low-cost, scalable, secure system that integrates broadband networking to deliver high-speed data over existing power lines. It allows users to create a high-speed local area network, without the need for new cabling. By installation of a BPL Head-End Unit, it enables Internet connection through existing power line cable. Users can simply connect the BPL Access End-Point Unit to any electrical socket in their home or office to create a link to the power line network.

Features & Specifications

Transmission Speed

- 200Mbps max.

Modulation

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

Frequency Range

- 2MHz ~ 34MHz

Security

- 128-bit/256-bit AES Link Encryption with key management for secure power line communications

Quality of Service Control

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

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

Hardware Specifications

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

Physical Specifications

- Dimensions (W,D, H):
93mm x 62mm x 38.8mm

Operating Environment

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

- Plugs into a standard AC power outlet to receive Internet signal
- Performs Power line to Ethernet conversion
- Ethernet output connects to a computer or supplies broadband input to a home networking router or gateway
- QoS supported
- Bandwidth management for service class differentiation

**BiPAC 2104****BPL Access End-point Unit with Noise-filtering Power Socket**

Transform your home power cables into a high-speed computer network

BPL solution is a low-cost, scalable, secure system that integrates broadband networking to deliver high-speed data over existing power lines. It allows users to create a high-speed local area network, without the need for new cabling. By installation of a BPL Head-End Unit, it enables Internet connection through existing power line cable. Users can simply connect the BPL Access End-Point Unit to any electrical socket in their home or office to create a link to the power line network.

Features & Specifications**Transmission Speed**

- 200Mbps max.

Modulation

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

Frequency Range

- 2MHz ~ 34MHz

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,
- VLAN priority field, IP Field, TCP port Field, UDP port Field 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

Hardware Specifications

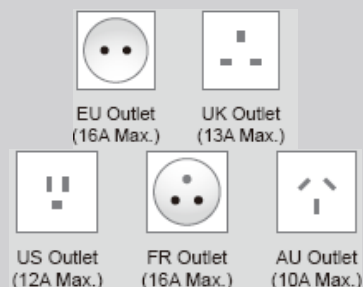
- AC power plug
- RJ-45 compatible
- Sync button
- Reset button
- AC outlet
- LED display:
 - STATUS
 - PLC
 - ETH

Physical Specifications

- Dimensions (W, D, H):
155.2mm x 62mm x 84mm

Operating Environment

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

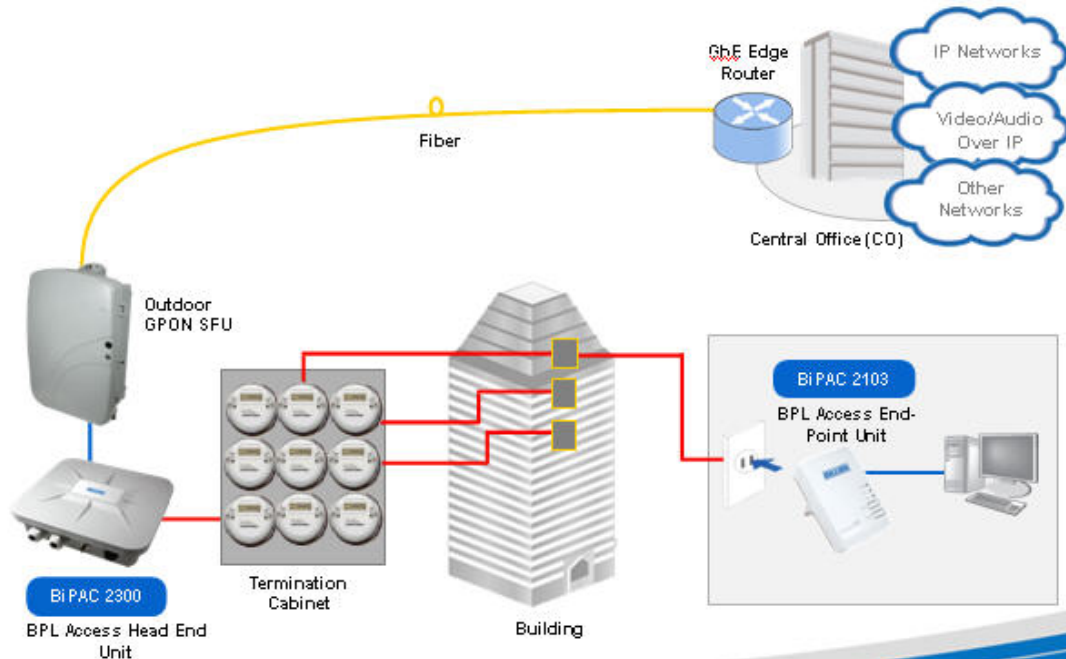


- AC Pass-through power socket with noise-filtering function
- Plugs into a standard AC power outlet to receive Internet signal
- Performs Power line to Ethernet conversion
- Ethernet output connects to a computer or supplies broadband input to a home networking router or gateway
- Maps Ethernet QoS to Power line QoS using VLAN priority
- Bandwidth management for service class differentiation

Application Scenarios

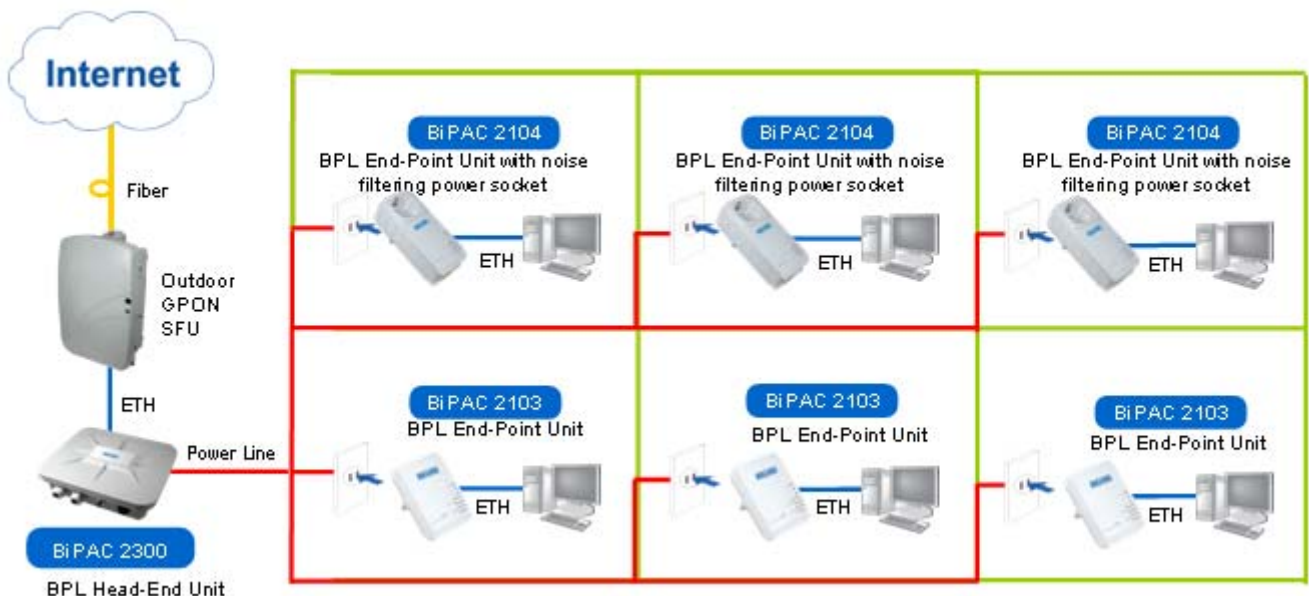
In-Building BPL Access Solution -

BPL Access Head-End Unit (BiPAC 2300) connects to CO side via Fiber network and distributes BPL signals to BPL Access End-Point Unit (BiPAC 2103) through its power cable.



The BPL Access Solution for Multiple Dwelling Building –

The BPL Access Head-End Unit (BiPAC2300) , located close to the building, supplies the entire network distribution. BPL Access End-Point Unit (BiPAC 2103, BiPAC 2104) connects to the Head-End and provides Internet access simply plug into power outlet.



Note: All the specifications are subject to change without prior notice.
V. 11182010