

Ricoh BB-HPL10A-R  
High Definition Power Line  
Communications Ethernet Adaptor  
Plug In to Easy Networking

**RICOH**



**fast**

**simple**



**secure**



# Ricoh HD-PLC Ethernet Adaptor

## Flexible, Stable Network Access from Any Power Outlet

Take advantage of high-speed Ethernet network communications by leveraging the electrical system in your office building or home office to send data. The RICOH® BB-HPL10A-R High Definition Power Line Communications Ethernet Adaptor (HD-PLC) is an easy and affordable way to build a secure local area network without investing in cables or wireless hardware. Share data, print files, send e-mails, and access the Internet simply by plugging into the nearest power outlet!



# FastFlexibleStableSecure

## Connect via any AC Power Outlet

**The Ricoh BB-HPL10A-R High Definition Power Line Communications Ethernet Adaptor converts network data to be sent securely across power lines.**

- Simply connect any printer, modem, router, computer or scanner to an Adaptor, and plug it into any power outlet in the building.
- Share information and peripheral devices among all users, and access the network from anywhere inside the electrical system.
- Easily move devices without reconfiguration — switch printer and PC locations in a flash, change conference rooms instantly, or quickly turn any room with an outlet into a workspace.

## Flexibility in a Hard-Wired Network? Yes!

**The Ricoh HD-PLC Ethernet Adaptor is excellent for temporary offices, trade shows or conventions and long-term uses in older buildings, homes and schools where installing network cables is cost prohibitive or impossible.**

- Every AC power outlet is a potential network access point — no need for cabling between conference rooms, classrooms or home offices.
- Expand the system whenever you need to with up to 16 total terminals (1 must be designated as the Master Adaptor).
- Connect up to eight (8) devices to each Terminal Adaptor.

## Minimize Expenses, not Bandwidth

**The Ricoh HD-PLC Ethernet Adaptor reduces the cost of setting up Ethernet networks in small and home offices while retaining the advantages of high-speed communications.**

- Reduce technology expenses for installing and maintaining a hard-wired Ethernet network.
- Eliminate costs to install network access points and equip every PC or laptop with wireless cards.

## Easy to Install for Stable and Secure Communications

- No PC required.
- Enjoy stable, error-free communications at data transmission speeds up to 190 Mbps.
- AES 128-bit data encryption for secure data transfers.
- "Closed" network for added security. Only devices connected through registered Terminal Adaptors may communicate with the Master Adaptor.
- No expertise needed! Simple to install, test and use; bright LEDs communicate network status and speed at-a-glance.



Turn any room with an outlet into a workspace. Plug the HD-PLC Adaptor's AC cord into a wall outlet and users can gain access to the network using the existing electrical wiring in the building.



Ease the burden and cost of setting up Ethernet networks in small office and home environments by leveraging the electrical system into which it is installed.

## Your Environmental Partner



**Ricoh continues its long-standing commitment to developing office solutions with environmentally friendly and superior energy- and supply-saving features, without compromising productivity.**

# Ricoh HD-PLC Ethernet Adaptor

## Specifications

### HD-PLC Ethernet Adaptor

Standard	HD-PLC
Transmission Speed	UDP: Max. 70 Mbps TCP when using Linux FTP: Max. 42 Mbps

Results may vary depending on electrical conditions, network environment and other factors.

Maximum Number of Adaptors per Network	16 (including the Master)
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Performance may be affected as more adaptors are added to the network.

Maximum Number of Devices per Adaptor	8
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Connecting more network devices to an adaptor may increase network traffic and affect performance.

### LAN Interface

Standard Interface	IEEE 802.3/IEEE 802.3u 10Base-T/100Base-TX, Auto MDI/MDI-X
Protocol	IPv4, IPv6, TCP, UDP
Access Method	CSMA/CD

### User Interface

Indicators	PLC (blue, red) LAN (green, orange) MASTER (green)
Other	Mode Selector (MASTER or TERMINAL switch) SETUP button FACTORY DEFAULT RESET button

### General

Dimensions (WxDxH)	4 3/4" x 1 9/16" x 2 3/4"
Operational Environment	32 – 104°F; 20 – 85% Humidity
Weight	0.53 lb.
Power Supply	Input 120 V, 60 Hz
Power Consumption	4W

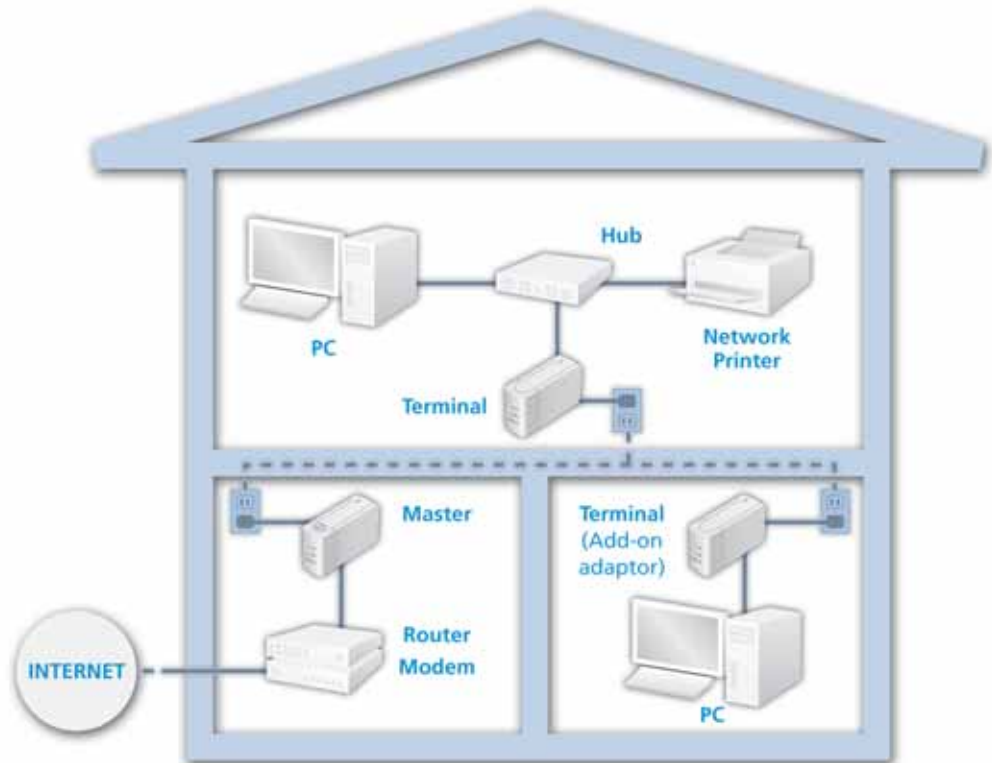
### HD-PLC Interface

Frequency Band	4 – 28 MHz
Modulation	Wavelet OFDM (16 PAM – 2 PAM)
Transmission PHY Rate	Max. 190 Mbps
Access Method	CSMA/CA, TDMA
Error Correction	Reed-Solomon encoder/decoder Convolutional encoder/ Viterbi decoder AES 128-bit encryption
Encryption	
Max. Communication Distance	Approx. 490 ft. (150m)

### Items Included

Ships with one Master Adaptor, one Terminal Adaptor, plus two Power Cords.  
Additional Adaptors can be purchased separately.  
This accessory will work with all current Ricoh printers.  
HD-PLC Model Name: BB-HPL10A-R  
EDP Code: 100123FNG

The Ricoh HD-PLC Ethernet Adaptor uses the existing electrical wiring system in your building to allow connected users to share data, networked peripherals, and to access the Internet through any AC power outlet.



# RICOH

www.ricoh-usa.com

### Bringing Ricoh Value to Your Organization

Ricoh technology offers a diverse portfolio of solutions to help your organization stay competitive and move ahead. Let Ricoh show you how to empower your business to improve critical processes, keep information secure, ensure compliance and promote environmental sustainability while reducing the total cost of ownership.

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