



# **PlugLine Smart Energy AV Ethernet**

## **User's Guide**

**PL7667-ETH**

## **Asoka® User Guide PlugLink PL7667-ETH**

THE SPECIFICATIONS AND INFORMATION REGARDING THE PRODUCTS IN THIS MANUAL ARE SUBJECT TO CHANGE WITHOUT NOTICE. ALL STATEMENTS, INFORMATION, AND RECOMMENDATIONS IN THIS MANUAL ARE BELIEVED TO BE ACCURATE BUT ARE PRESENTED WITHOUT WARRANTY OF ANY KIND, EXPRESSED OR IMPLIED. USERS MUST TAKE FULL RESPONSIBILITY FOR THEIR APPLICATION OF ANY PRODUCTS.

THE SOFTWARE LICENSE AND LIMITED WARRANTY FOR THE ACCOMPANYING PRODUCT ARE SET FORTH IN THE INFORMATION PACKET THAT SHIPPED WITH THE PRODUCT AND ARE INCORPORATED HEREIN BY THIS REFERENCE. IF YOU ARE UNABLE TO LOCATE THE SOFTWARE LICENSE OR LIMITED WARRANTY, CONTACT YOUR ASOKA REPRESENTATIVE FOR A COPY.

The following information is for FCC compliance of Class A devices: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio-frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case users will be required to correct the interference at their own expense.

Modifying the equipment without Asoka's written authorization may result in the equipment no longer complying with FCC requirements for Class A digital devices. In that event, your right to use the equipment may be limited by FCC regulations, and you may be required to correct any interference or radio or television communications at your own expense.

You can determine whether your equipment is causing interference by turning it off. If the interference stops, it was probably caused by the Asoka equipment or one of its peripheral devices. If the equipment causes interference to radio or television reception, try to correct the interference by using one or more of the following measures:

- Turn the television or radio antenna until the interference stops.
- Move the equipment to one side or the other of the television or radio.
- Move the equipment farther away from the television or radio.
- Plug the equipment into an outlet that is on a different circuit from the television or radio. (That is, make certain the equipment and the television or radio is on circuits controlled by different circuit breakers or fuses.)

Modifications to this product not authorized by Asoka could void the FCC approval and negate your authority to operate the product.

NOTWITHSTANDING ANY OTHER WARRANTY HEREIN, ALL DOCUMENT FILES AND SOFTWARE OF THESE SUPPLIERS ARE PROVIDED "AS IS" WITH ALL FAULTS. ASOKA DISCLAIM ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THOSE OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OR ARISING FROM A COURSE OF DEALING, USAGE OR TRADE PRACTICE.

**Asoka® User Guide**  
**PlugLink PL7667-ETH**

IN THE EVENT SHALL ASOKA BE LIABLE FOR ANY INDIRECT, SPECIAL, CONSEQUENTIAL OR INCIDENTAL DAMAGES, INCLUDING, WITHOUT LIMITATION, LOST PROFITS OR LOSS OR DAMAGE TO DATA ARISING OUT OF THE USE OF INABILITY TO USE THIS MANUAL, EVEN IF ASOKA HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

<b>Revision</b>	<b>Date</b>	<b>Description</b>
66-0366-01Rev.003	Sep.2013	Release

## Table of Contents

<b>Chapter</b>	<b>Title</b>	<b>Page</b>
1	Introduction	5
2	Important Safety Instructions for the PlugLink	7
3	Overview	8
4	Installation	11
5	Getting Started with the PlugLink	15
6	Basic PL7667-MST Configuration	19
7	PL7667-MST Administration	22
8	Reset and network of PLC	26
Appendix A	Quick Guide to the PlugLink Default Settings	29

## Chapter 1

### Audience

This guide is designed as a reference for the networking or computer technician responsible for installing a PlugLink PL7667-ETH, hereafter referred to as the *gateway*. It is assumed that you are familiar with and have a working knowledge of the concepts and terminology associated with Ethernet and local area networking.

### Purpose

This guide describes the hardware and software features of the PlugLink PL7667-ETH. It describes the physical and performance characteristics of the PL 7667-ETH, explains how to install and configure the PL7667-ETH, and provides troubleshooting information and specifications.

### Conventions

This guide employs the conventions described below to convey instructions and information.




Command descriptions use the following conventions:

- Commands and keywords are in *italic text*.
- Arguments for which you supply values are in **bold**.
- Square brackets ([ ]) indicate optional elements.
- Braces ({ }) group require choices and vertical bars (|) separate the alternative elements.
- Braces and vertical bars within square brackets ({{|}}) indicate a required choice within an optional element.

Interactive examples use the following conventions:

- Terminal sessions and system displays are in normal screen font.
- Information to be entered in is in **bold text**.

Notes, cautions and tips use these conventions and symbols:

 Note	Means <i>reader take note</i> . Notes contain helpful suggestions or references to materials not contained in this manual.
	Means <i>reader be careful</i> . In this situation, you might do something that could result in equipment damage or loss of data.
	Means <i>the following will help you solve a problem</i> . The tips information might not be troubleshooting or even an action, but could be useful information.

### Obtaining Documentation

**Asoka® User Guide**  
**PlugLink PL7667-ETH**

You can access the most current PlugLink™ documentation on the Asoka website at this URL:

<http://www.asokausa.com>

**Document Feedback**

You can submit comments via email to [custserv@asokausa.com](mailto:custserv@asokausa.com)

You can also submit your comments via regular mail by writing to the following address:

Asoka USA Corporation  
Attn: Customer Service,  
2620 Augustine Drive Suite 230  
Santa Clara, CA 95054 USA  
USA

We appreciate your comments.

## Chapter 2

### **Important Safety Instruction for the PlugLink PL7667-ETH**

The following precautions should be taken when using this product:

- Read all instructions before installing and operating this product.
- Do not open the cover on this product and/or alter this product in any way.
- Follow common household electrical safety practices.

If you have any questions or concerns regarding these safety measures, please contact Technical Support at +1 408 550 8167 or email at [support@asokausa.com](mailto:support@asokausa.com) Monday through Friday from 9:00 am to 5:00 pm PST (excluding holidays.)

## Chapter 3

### Overview

This chapter provides information about the following topics:

- Features
- Package Contains
- Front Panel Description
- Rear Panel Description

### Features

PlugLink 7667-ETH features:

- Utilizes the existing electrical wiring to distribute data services
- IEEE 802.3, 802.3u, 802.3x, 802.3z/ab, 802.1q
- One auto-negotiating 10/100BASE-T Ethernet port
- Status LEDs showing Ethernet activity and link status
- Up to 200Mbps of data transmission
- Energy control

### Package Contains

Open the package and check that you have all the following items:

1. PlugLink PL7667-ETH
2. 6' Ethernet cable
3. Warranty and Support Information Card

If any of the parts are incorrect, missing, or damaged, please contact the retailer where you made your purchase. Keep the carton, including the original packing materials, in case you need to return the unit for repair.

### The Top Panel

The top panel of the PL7667 contains one power switch. See Figure 3-1.



**Asoka® User Guide**  
**PlugLink PL7667-ETH**



*Figure 3-1: PL7667-ETH Top Panel*

**The Front Panel**

The front panel of the PL7667 contains the one Power Outlet.



*Figure 3-2: PL7667-ETH Front Panel*

**Asoka® User Guide**  
**PlugLink PL7667-ETH**

**Side Panel**

You can use the status lights to verify connections. Viewed from top to bottom, the table below describes the lights on the side panel of the unit.

*Table 3-1: Status Light Descriptors*

Power	On Off	Device is powered on Device has no power
PLC Activity	Blinking Red Blinking Yellow Blinking Green Off	Low Connection Good Connection Excellent Connection No Connection
ETH Link	On Blinking Off	Ethernet Connectivity Ethernet Traffic No Ethernet Connectivity

**The Bottom Panel**

The bottom panel of the PL7667-ETH contains one (1) Ethernet ports as shown below.



*Figure 3-2: PL7667-ETH Bottom Panel*

**The Rear Panel**

The rear panel is where the product label is located. The product label contains the items listed below.


- Model number
- Unique device password(PLC DAK)
- Powerline MAC Address(PLC MAC)
- Ethernet MAC Address
- Serial number



For future convenience, please write this information down in your Warranty Support Information card.

---


**Asoka® User Guide**  
**PlugLink PL7667-ETH**



Activation Code: XXXX-XXXX-XXXX



**Asoka USA Corporation**  
 PlugLine Smart Energy AV Ethernet  
 Model: PL7667-ETH

PLC DAK : XXXX-XXXX-XXXX-XXXX  
 PLC MAC Address: XXXXXXXXXXXXXXXX  
 Device Address: XXXXXXXXXXXXXXXX



SN: XXXXXXXXXXXXXXXX

MADE IN CHINA XX-XXXX-XXX

  
  
 Input: 100-240VAC  
 12A 60Hz

**Operating System and Browser Support**

You can access the web-based interface by using the operating systems and browsers listed in Table 3-2.

OS	Minimum Service Pack or Patch	Microsoft Internet Explorer	Mozilla Firefox	Netscape Communicator	Other
Windows 98SE	Second Edition	5.5 or above	1.x or above	7.x +	Opera 7 +
Windows ME		5.5 or above	1.x or above	7.x +	Opera 7 +
Windows 2000		5.5 or above	1.x or above	7.x +	Opera 7 +
Windows XP		5.5 or above	1.x or above	7.x +	Opera 7 +
Windows 2003 Server		5.5 or above	1.x or above	7.x +	Opera 7 +
Windows NT 4.0		5.5 or above	1.x or above	7.x +	Opera 7 +
RedHat 6.2			1.0	7.x +	Opera 6 Konqueror 3+
RedHat 7.2			1.0	7.x +	Opera 6 Konqueror 3+
Fedora Core 2.0			1.0	7.x +	Opera 6 Konqueror 3+
Fedora Core 3.0			1.0	7.x +	Opera 6 Konqueror 3+
Fedora Core 4.0			1.0	7.x +	Opera 6 Konqueror 3+
Mandriva 10			1.0	7.x +	Opera 6 Konqueror 3+
Unix			1.0	7.x +	Opera 6 Konqueror 3+
Mac OS X		5.2	1.x	7.x +	Opera 7 Safari 1.x +
Mac OS X 1.3x		5.2	1.x	7.x +	Opera 7 Safari 1.x +
Mac OS X 10.4.x		5.2	1.x	7.x +	Opera 7 Safari 1.x +

*Table 3-2: Supported operating systems and browsers*



Ensure that your Internet browser popup blocker is disabled. To disable the popup blocker, follow these steps:

Under Internet Explorer

1. Open a web browser.
2. Under the *Tools* menu, select *Turn off Popup Blocker*.

Under Firefox or Netscape

1. Open a web browser.
  2. Under the *Tools* menu, select *Options*.
  3. Choose the *Content* icon.
  4. Uncheck the box next to *Block Popup Windows*.
  5. Click *OK*
-

## Chapter 4

### Installation

This chapter describes how to install your CPE device and how to interpret the LEDs to ensure proper operation. Read the topics, and perform the procedures in the following order:

- Preparing for Installation
- Warnings
- Safety Instructions
- Installing the CPE
- Connecting to a 10/100 Port
- Wall mounting the CPE

#### Preparing for Installation

---



**Note**

If you mount the CPE to a power outlet, use the screws supplied with the CPE.

---



There are no serviceable parts inside the unit. Removing the screws, cover, or otherwise dismantling the unit voids the warranty.

---

#### Warnings

- Only trained and qualified personnel should be allowed to install or replace this equipment.
- Read the installation instructions before you connect the system to its power source.
- Before working on the equipment that is connected to power lines, remove all jewelry (including rings, necklaces, and watches). Metal objects will heat up when connected to power and ground and can cause serious burns or weld the metal object to the terminals.
- The plug-socket combination must be accessible at all times because it serves as the main disconnecting device.
- To prevent the system from overheating, do not operate it in an area that exceeds the maximum recommended ambient temperature of 104°F (40°C).

## Asoka® User Guide PlugLink PL7667-ETH

- This product relies on the building's installation for short-circuit (over current) protection. Ensure that a fuse or circuit breaker no larger than 120 VAC, 15A U.S. (240 VAC, 10A International) is used on the phase conductors (all current-carrying conductors).
- A voltage mismatch can cause equipment damage and may pose a fire hazard. If the voltage indicated on the label is different from the power outlet voltage, *do not connect the device to that receptacle*.
- Do not work on the system or connect or disconnect cables during periods of lightning activity.
- Ultimate disposal of this product should be handled according to all national laws and regulations.

### Safety Instructions

Read these safety instructions carefully.

- Read all cautions and warnings on the equipment.
- Plug this equipment directly into a power outlet. No power strips and no extension cords.
- Make sure the equipment is connected to the right voltage.
- For pluggable equipment, the socket-outlet must be installed near the equipment and must be accessible.
- Place the Ethernet cord where people cannot step on it. Do not place anything over the Ethernet cord.
- Disconnect this equipment from the power outlet before cleaning it. Do not use liquid or sprayed detergent for cleaning. Use moisture sheet or cloth for cleaning.
- Keep this equipment from excessive humidity.
- The openings on the enclosure are for air convection and protect the equipment from overheating. Do not cover the openings.
- If the equipment will not be used for a long period of time, disconnect the equipment from the power outlet to avoid any damage from transient over-voltage.
- Do not pour any liquid into opening. This could cause fire or electrical shock.
- Do not open the equipment casing. For safety reasons, the equipment should only be opened by qualified service personnel.
- Have the equipment checked by a service professional if one of the following situations arises:
  - The plug is damaged.
  - Liquid has entered the equipment.
  - The equipment has been exposed to moisture.
  - The equipment does not work properly, or you cannot get it to work according to user's manual.
  - The equipment has been dropped or damaged.
  - The equipment has obvious signs of breakage.
  - Do not leave this equipment in an unconditioned environment. Temperatures above 45°C (113°F) can damage the equipment.
  - Keep this guide for later reference.

### Installing the CPE

**Asoka® User Guide**  
**PlugLink PL7667-ETH**

You can install the CPE simply by plugging directly into a power outlet or by physically mounting onto a power outlet. Before you begin the installation, decide how you want to install the CPE by reviewing the illustrations in these sections:

- Installing the CPE directly to a power outlet (without mounting screws and brackets)

**Installing the CPE directly to a power outlet (without mounting screws and brackets)**

The CPE can be simply plugged in directly to a power outlet. If you do not wish to physically mount the CPE onto the power outlet, follow these steps:

- Take out what you need by removing the items shown in Figure 1-1 from the shipping container:

1	PlugLink PL 7667-ETH
2	6' Ethernet Cable



Figure 4-1: PlugLink PL 7667-ETH, Ethernet Cable

- Connect the CPE into a nearby wall outlet
- Connect the enclosed Ethernet cable to the Ethernet port of the unit
- Connect the opposite end of the cable to an Ethernet port on the PC or laptop

## Chapter 5

### Getting Started with the PL7667-ETH

This chapter provides a quick step-by-step installation and setup procedure guide for a standalone PL 7667-ETH.

For detailed installation procedures for mounting your CPE, see Chapter 4, "Installation." For product overview information, see Chapter 3, "Overview."

### Connecting to a PC

To perform the initial configuration, follow these steps:

1. Connect a Category-5 straight-through cable to the 10/100 ports on the PL7667.
2. Connect the other end of the cable to an Ethernet (RJ-45) port on the workstation, PC, or server.
3. Plug the PL7667 directly into an outlet.

1	PlugLink PL 7667-ETH
2	Ethernet cable
3	Power outlet



*Figure 5-1: Connecting to a LAN port.*



## Asoka® User Guide PlugLink PL7667-ETH

### Assigning your PC to the same network as the CPE

The -PL 7667 has an IP address: *192.168.1.254*.

For network access, you must manually assign your PC an IP address of **192.168.1.x**, where “*x*” is a number between 1 and 254(excluding 253.)

### Accessing the CPE from your Browser

1. Open an Internet browser (i.e. Internet Explorer or Mozilla Firefox).
2. In the address field, type **192.168.1.254** and press *Enter*.

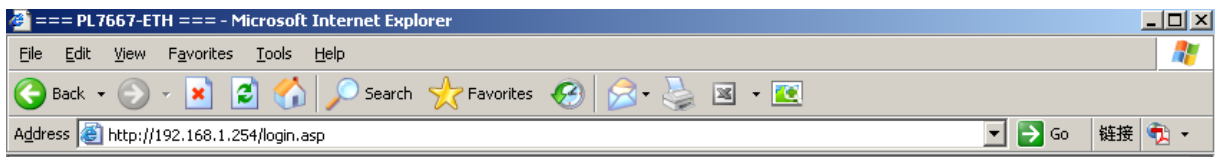


Figure 5-2: Address field.

3. In the *User ID* field, type **admin**.
4. In the *Password* field, type **welcome**.
5. Click *Login*.

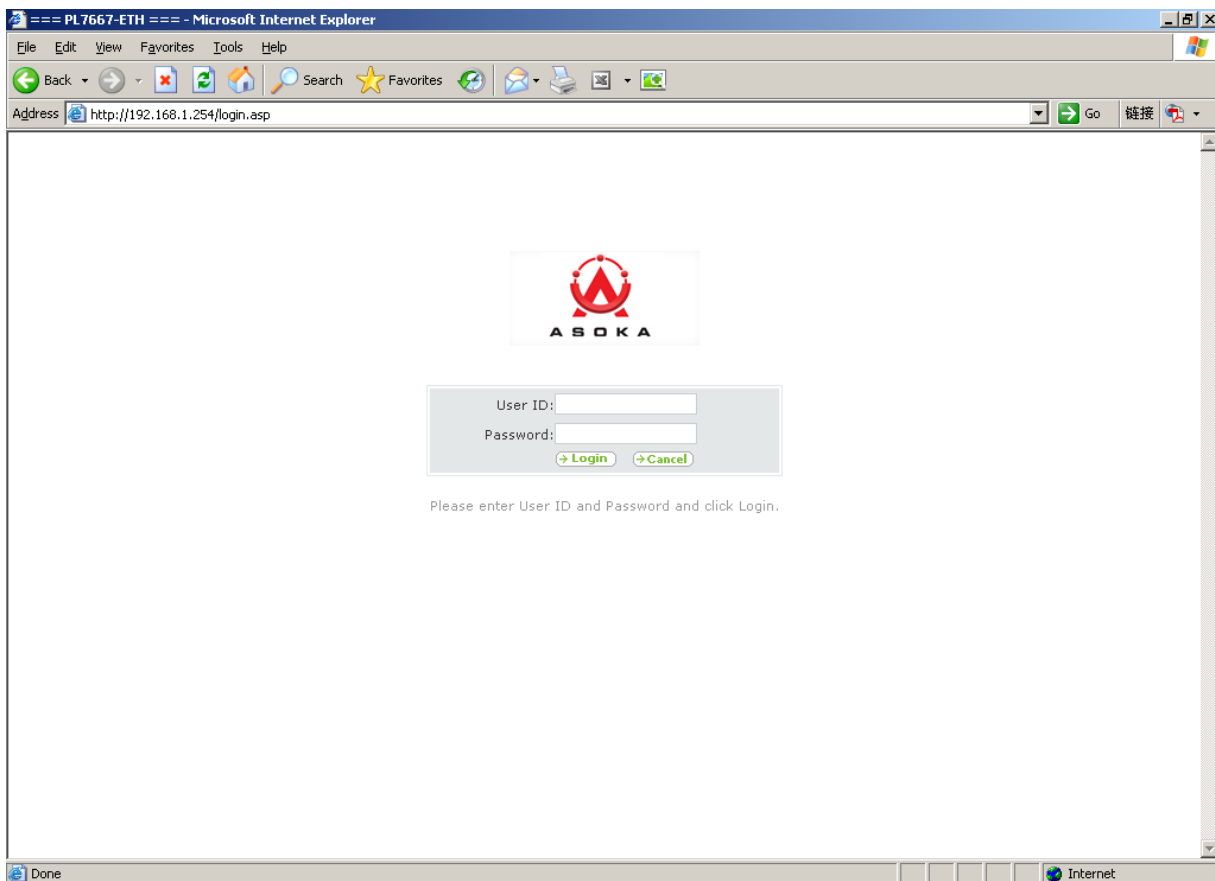


Figure 5-3: Login screen



The username and password are case sensitive.



For security, you should set a unique system password after initial login. For instructions on how to set a unique system password, see Chapter 7.

## Understanding the PL7667-ETH Web Interface

When you access the web-based user interface (UI), the System Details page is the first page you will see. The System Details page shows you a quick view of the adapter's status and settings. All setup pages can be reached from this page.



The *System Details* page is also the Home Page of the adapter's web interface.

Device Information	
Model Number	PL7667
Serial Number	SA1104130031
Hardware Version	1.10
Firmware Version	1.21
Sim Firmware Version	INT7400-MAC-5-0-5010-01-650-20100818-FINAL-B
Device MAC Address	2 :13:c1:00:d5:ab
PLC MAC Address	00:13:c1:00:d5:a0
IP Address	192.168.8.155
Subnet Mask	255.255.255.0

Figure 5-4: System Details Page (Home page)

### 1. Quick Main Navigation Links

## **Asoka® User Guide**

### **PlugLink PL7667-ETH**

The UI is divided into five main logical sections and you can be directed to any of the five sections by clicking on their corresponding links.

#### **2. Quick Sub Navigation Links**

In each of the five main logical sections, sub navigation links on the right will appear, providing you with logical links for each specific category.

#### **3. Quick Buttons**

- 1) The *Home* button is available in every page of the UI. Pressing this button will take you back to the home page, which is the *System Details* page.
- 2) The *Glossary* button is available in every page of the UI. Pressing this button will take you to a glossary page that defines many of the technical terms used in this UI.
- 3) The *Help* button is available in every page of the UI. Pressing this button will take you to a help page that provides detailed explanations and steps on configuring your gateway.
- 4) The *Logout* button is available in every page of the UI. Pressing this button will enable you to log out of the gateway.

#### **4. Detail Information**

Displays detailed information about the gateway that includes: model number, firmware version number, hardware version, serial number, Local Area Network (LAN) settings

#### **5. Page Name**

The page you are on is identified by its *Page Name*.

## Chapter 6

### Basic PL7667 – ETH Configuration

This chapter presents procedures for configuring the basic parameters of your PL7667 interface, including IP, Subnet Mask and DNS settings.

This chapter contains the following sections:

- LAN Settings

#### Configuring your LAN Settings

To configure the CPE's LAN settings, click *IP ADDRESS* on the Main menu. The *IP ADDRESS Configuration Page* is the first page under the *IP ADDRESS* section.

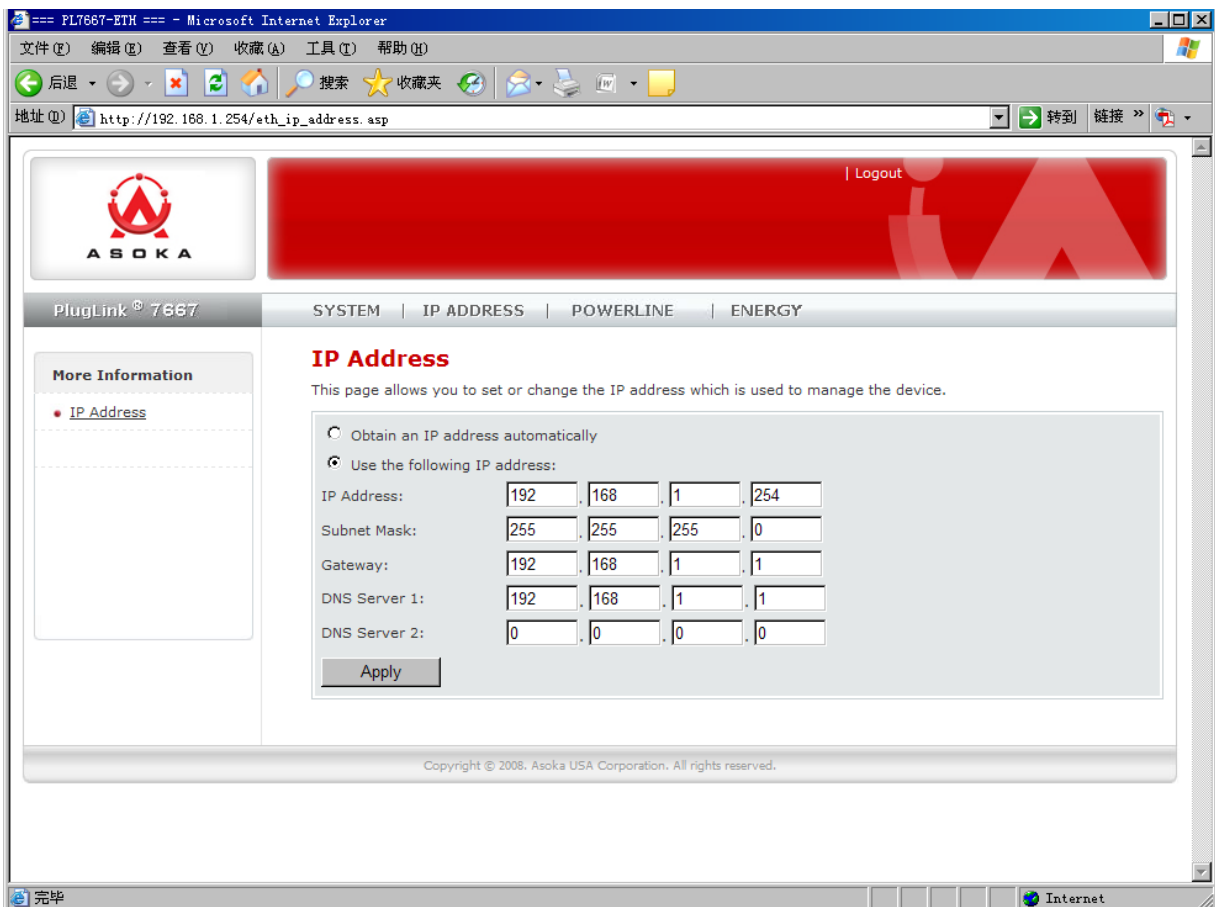


Figure 6-1: IP ADDRESS Configuration Screen

## Asoka® User Guide PlugLink PL7667-ETH

### 1. IP Address

The IP Address is the internal IP address of the PL7667. The default IP address is **192.168.1.254**. To access the PL7667 Setup Interface, type this IP address into the address or navigation bar of your web browser. This address can be changed if needed. To change the IP address, type in the new IP address and click *Apply*.



The IP address you choose should be a non-routable IP. Examples of a non-routable IP are:

192.168.x.x (where x is anything between 0 and 255)  
10.x.x.x (where x is anything between 0 and 255)



### 2. Subnet Mask

A Subnet Mask allows you to break down what appears (logically) to be a single large network into smaller ones, which reduces network overhead.

## Powerline

The PL7667-ETH allows you to configure the Powerline network encryption key to talk to other Powerline devices on your network.

To scan and view a list of Powerline devices on your network, simply go to *POWERLINE* in the main menu and select *Device Scan* in the sub menu.

**Asoka® User Guide**  
**PlugLink PL7667-ETH**

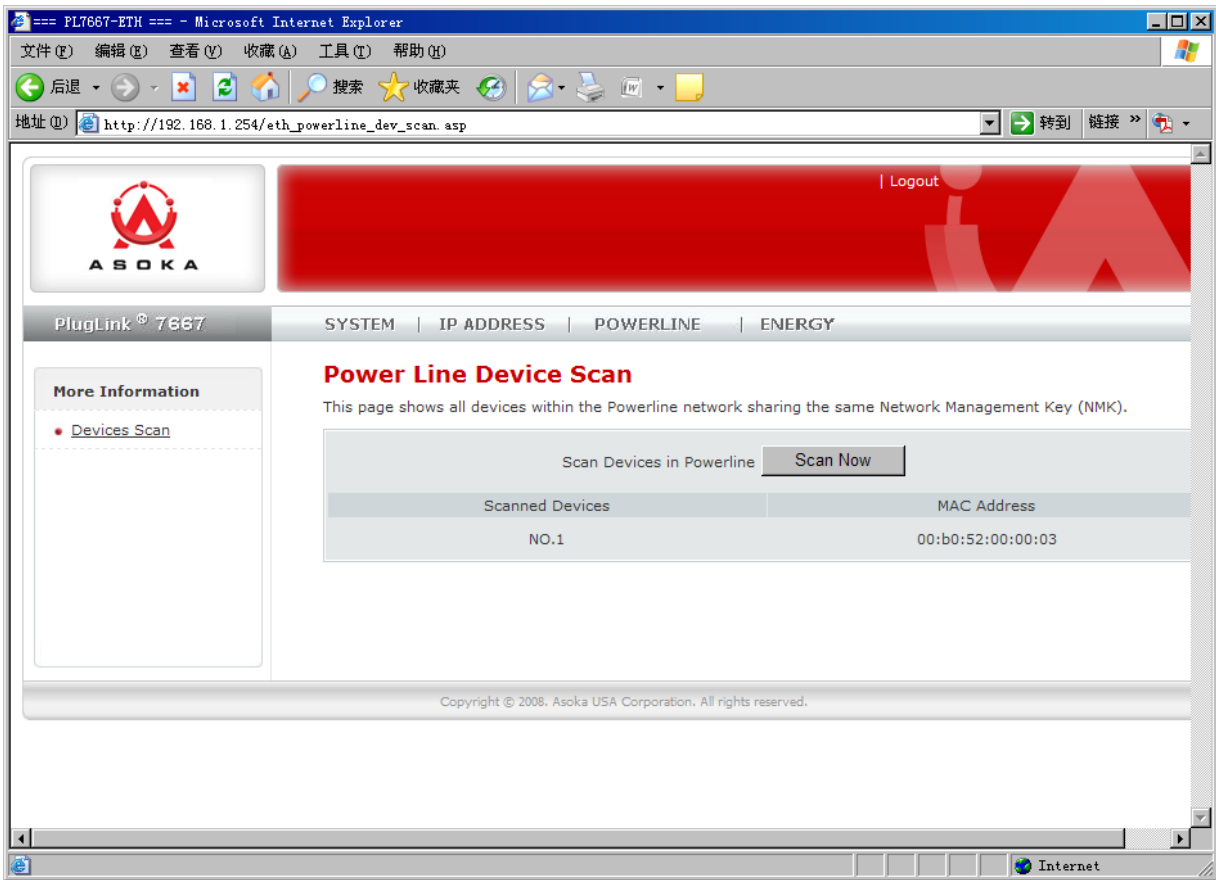


Figure 6-2: Device Scan Screen



**Note**

The *Device Scan* screen will only list Powerline devices on your network that have the same Powerline Network Encryption KEY (NEK).

## Chapter 7

### PL7667 – ETH Administration

This chapter describes how to perform operations to administer your PL7667-ETH. This chapter consists of the following sections:

- Reboot
- *Restoring Factory Default*
- *Firmware upgrade*

#### Reboot

Sometimes it may be necessary to reboot the adapter if it is working improperly. Rebooting will not delete any of your configuration settings. To reboot the adapter:

1. Click on *Systems* in the Main menu.
2. In the Sub menu, select *Reboot System*.
3. Click *Reboot*.
4. A popup window will appear to confirm your request to reboot the adapter. Click *OK* to continue.
5. After a minute, the home page of the adapter will reappear automatically. If not, type the adapter's IP address (default = **192.168.1.254**) into the address or navigation bar of your web browser.



It is important not to turn off the power or unplug the adapter (CPE) during the reboot.

---

## Asoka® User Guide PlugLink PL7667-ETH

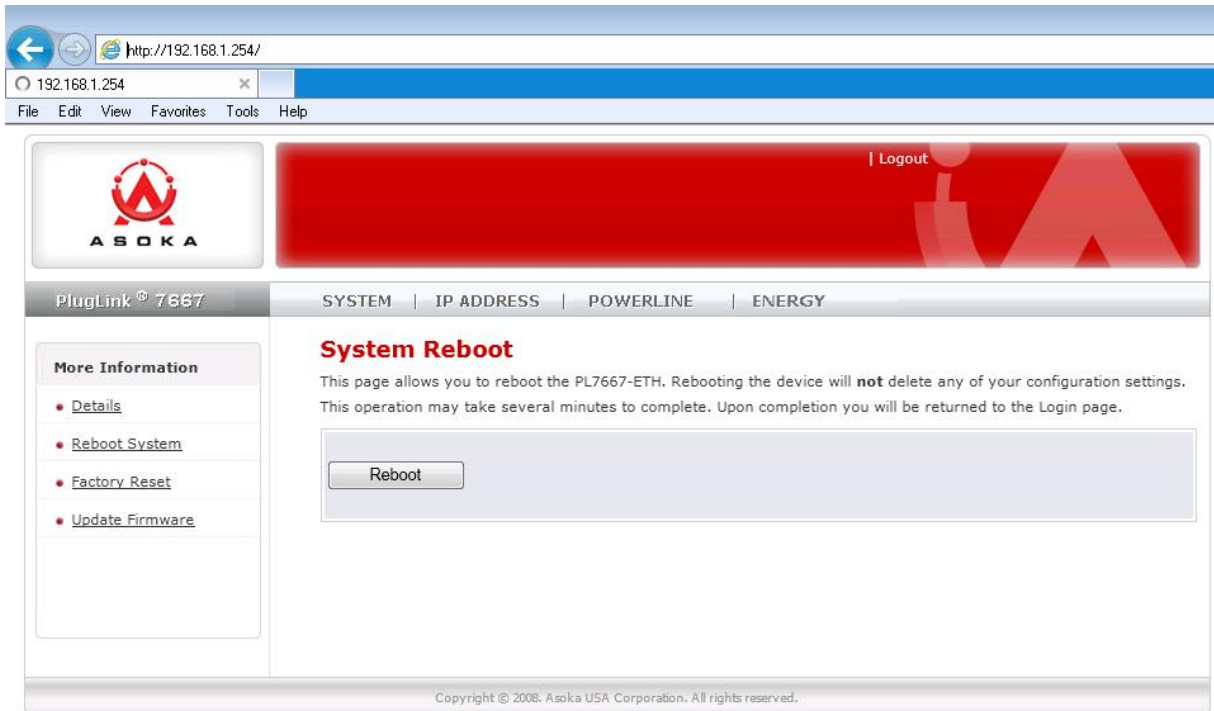


Figure 7-1: Reboot screen

### Restoring Factory Defaults

At times, you may need to restore factory default settings on the adapter. It is recommended that you back up your settings prior to restoring to factory default settings. To restore factory default settings:

1. Click on *Systems* in the Main menu.
2. On the Sub menu, select *Factory Reset*.
6. Click *Restore Default*.
7. A popup window will appear to confirm your request to reboot the adapter. Click *OK* to continue.
8. After a minute, the home page of the adapter will reappear automatically. If not, type the adapter's IP address (default = **192.168.1.254**) into the address or navigation bar of your web browser.



## Asoka® User Guide PlugLink PL7667-ETH

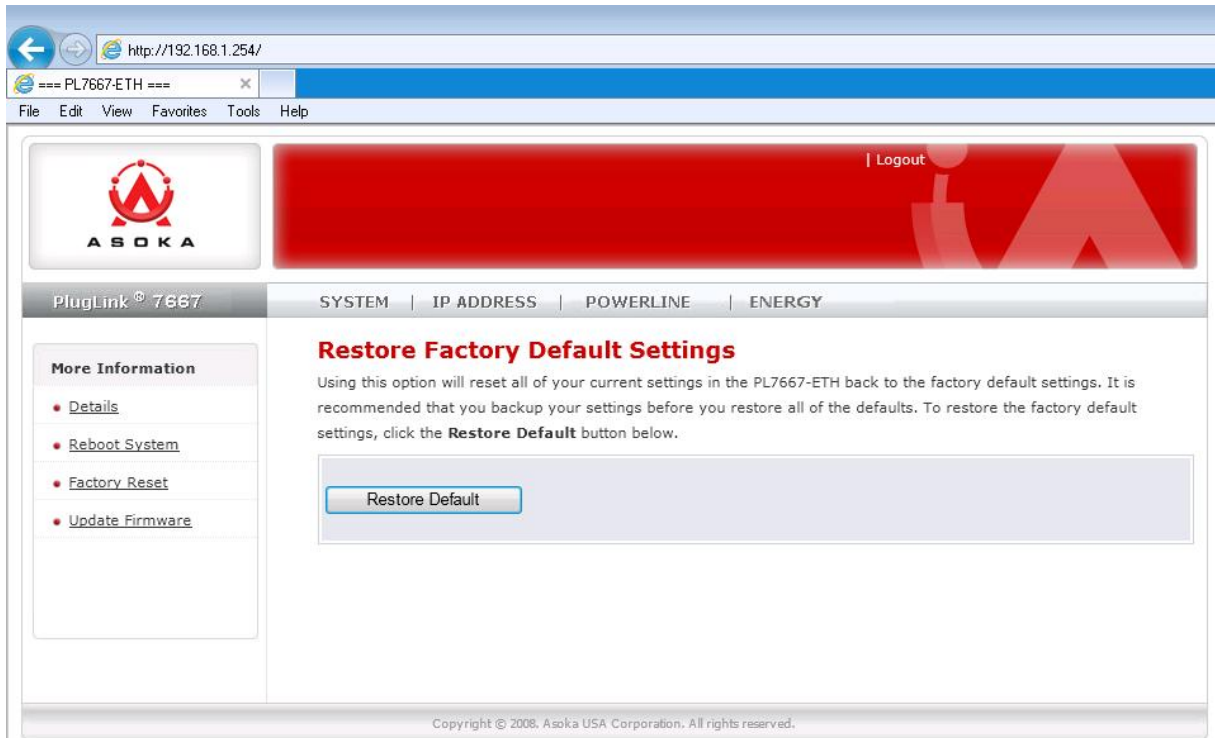


Figure 7-2: Restoring Factory Default screen

### Update Firmware

Firmware updates will be made available periodically from Asoka. Firmware updates contain feature improvements and fixes to problems that may have existed. When Asoka releases new firmware, you can download the firmware from Asoka's web site at <http://www.asokausa.com> and update your adapter's firmware to the latest version.

To upload a new firmware upgrade onto the CPE, follow these steps.

1. Click on *Systems* in the Main menu.
2. In the Sub menu, select *Update Firmware*.
3. Click *Browse* to locate the new firmware update file downloaded from Asoka's web site.
4. The box next to the *Browse* button will now display the location and name of the firmware file you just selected. Click *Update*.
5. You will be asked if you are sure you want to continue. Click *OK*.
6. You will see one more message. This message tells you that the CPE may not respond for up to one minute as the firmware is loaded into the adapter and it is rebooted. Click *OK*.
7. When the firmware upgrade is complete, the adapter home page should appear automatically. If not, type in the CPE's address (default – **192.168.1.254**) into the address or navigation bar of your web browser.

**Asoka® User Guide**  
**PlugLink PL7667-ETH**

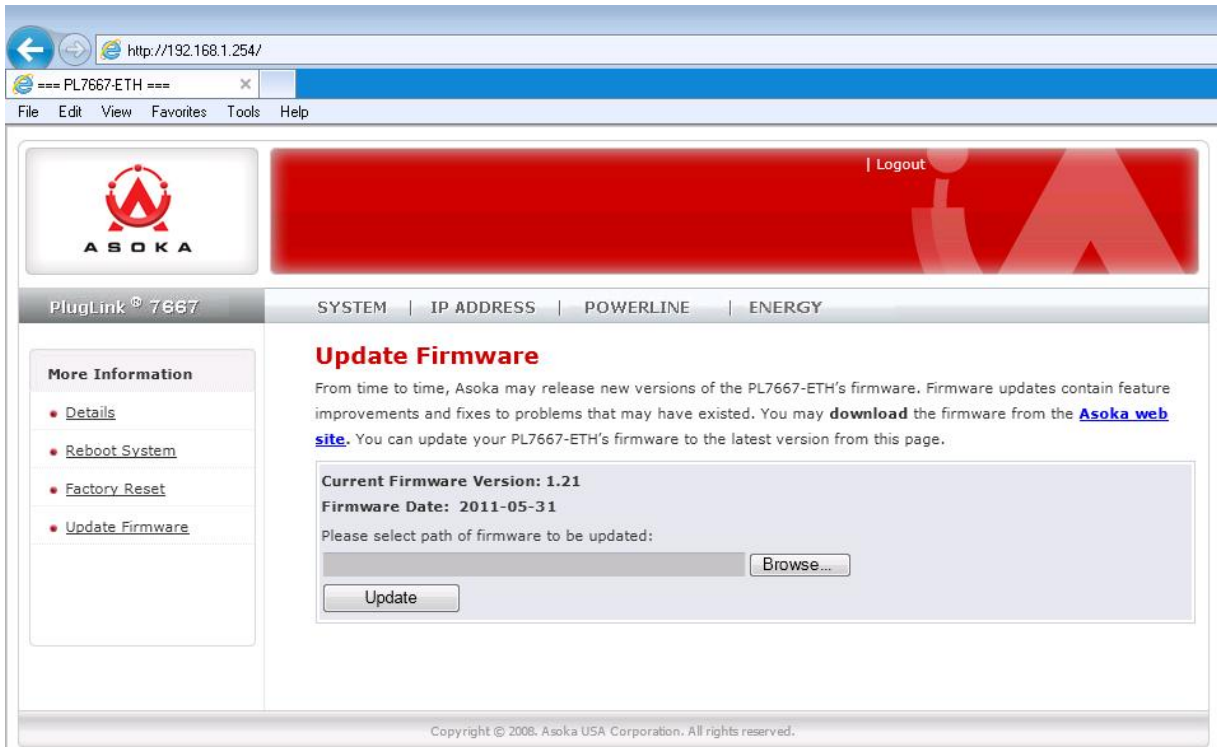


Figure 7-3: Firmware upgrade screen.

## Chapter 8

### Reset and network of PLC

The PL7667-ETH device has two hardware push buttons:

**FW RST (Firmware Default Reset ) button** – Resets the PL7667-ETH back to factory default settings. Press and hold the button with a pin or sharp object for about 2 seconds until you see the lights on the device flash briefly.

**SECURITY (Network ID) button** – All PL7667-ETH devices have a default password Network Encryption Key (NEK) set to “HomePlugAV” allowing them to communicate to each other. The SECURITY button allows you to set a devices’ password to a randomized Network Encryption Key (NEK) for maximum security. You can then set other devices to the same NEK by using their SECURITY button. Only units with the same NEK can communicate to each other.

#### SETTING A RANDOMIZED NETWORK PASSWORD



1. Select a PL7667-ETH (Device A) and plug into an AC outlet. The POWER light indicator should be lit solid green.
  - a. Press the SECURITY button BRIEFLY (1 second) and release. The POWER light should now be blinking green.
  - b. *IMPORTANT:* If the POWER light is not blinking green, repeat Step “a” until the power light blinks green.
  - c. This unit is now ready to create a new randomized NEK (Net Encryption Key) network. This unit will remain in this “adder” mode for about 2 minutes.
2. Select another PL7667-ETH (Device B) and plug into a second outlet.
  - a. Press the SECURITY button BRIEFLY (1 second) and release. The POWER light should now be blinking green.
  - b. *IMPORTANT:* If the power light is not blinking green, repeat Step “a” until the power light is blinking green.
3. In about 15 seconds the POWER light will change from flashing green to solid green and the PLC ACT (Power line Communication Activity) light will turn solid green (flashing green when there is data traffic) indicating they are synchronized with the same NEK.
4. Congratulations, you are done!

## Asoka® User Guide PlugLink PL7667-ETH

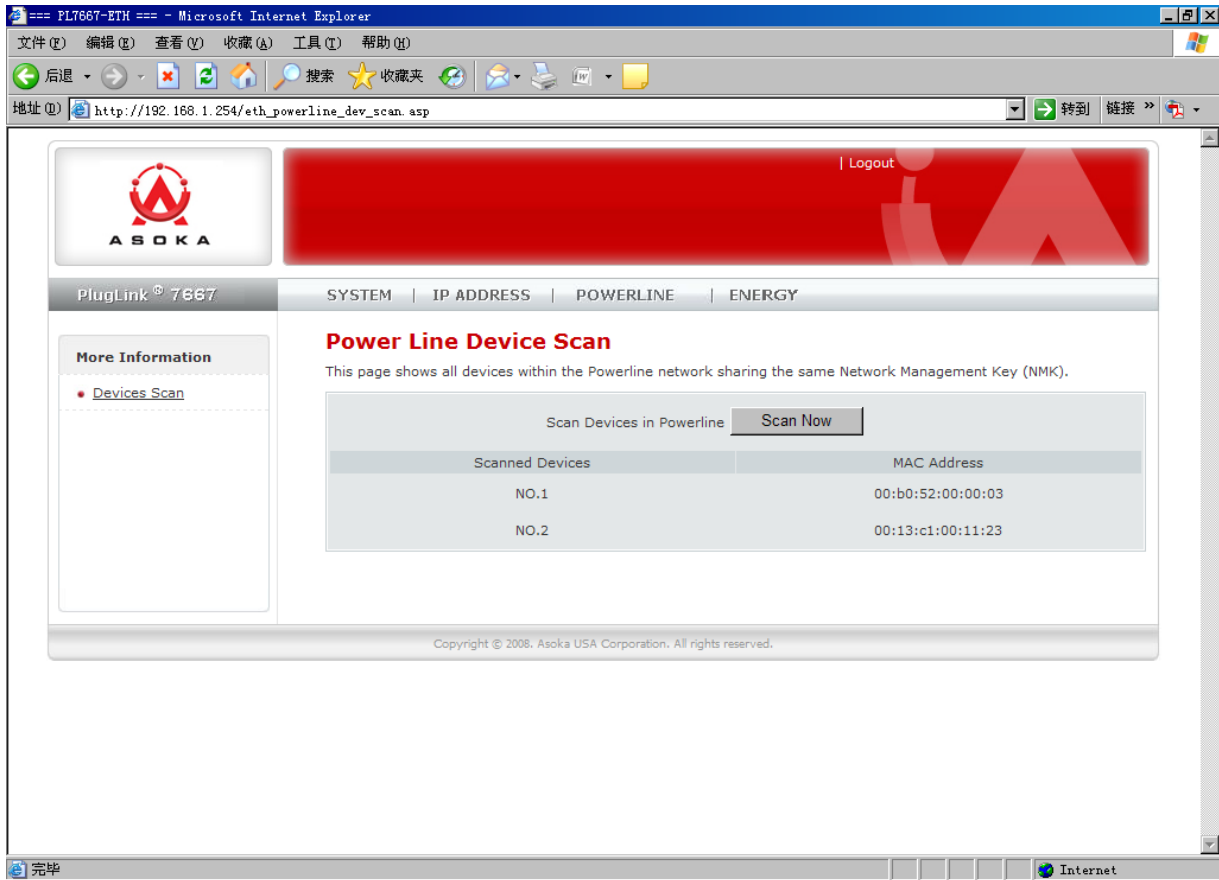
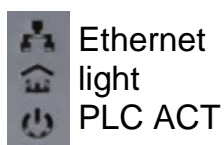


Figure 8-1: Two devices of PLC

### ADDING A THIRD OR MORE PLUGLINK HD AV DEVICES



Ethernet  
light  
PLC ACT



Device A



Device B



Device C

1. Plug your new PL7667-ETH (Device C) into an AC outlet. The POWER light indicator should be lit solid green.
  - a. Press the SECURITY button BRIEFLY (1 second) and release. The POWER light should now be blinking green.
  - b. *IMPORTANT:* If the POWER light is not blinking green, repeat Step "a" until the power light is blinking green.
  - c. This unit is now ready to join the existing HD AV network. This unit will remain in this "adder" mode for about 2 minutes.
2. From your existing devices (either device A or device B) press the SECURITY button BRIEFLY (1 second) then release. The POWER light should now be blinking green.
  - d. *IMPORTANT:* If the power light is not blinking green, repeat Step "2" until the power light is blinking green.

## Asoka® User Guide PlugLink PL7667-ETH

3. In about 15 seconds the POWER light will change from flashing green to solid green and the PLC ACT (Power line Communication Activity) light will turn solid green (flashing green when there is data traffic) indicating they are synchronized with the same NEK.
4. To add more PlugLink devices; simple repeat this process per device.
5. Congratulations, you are done!

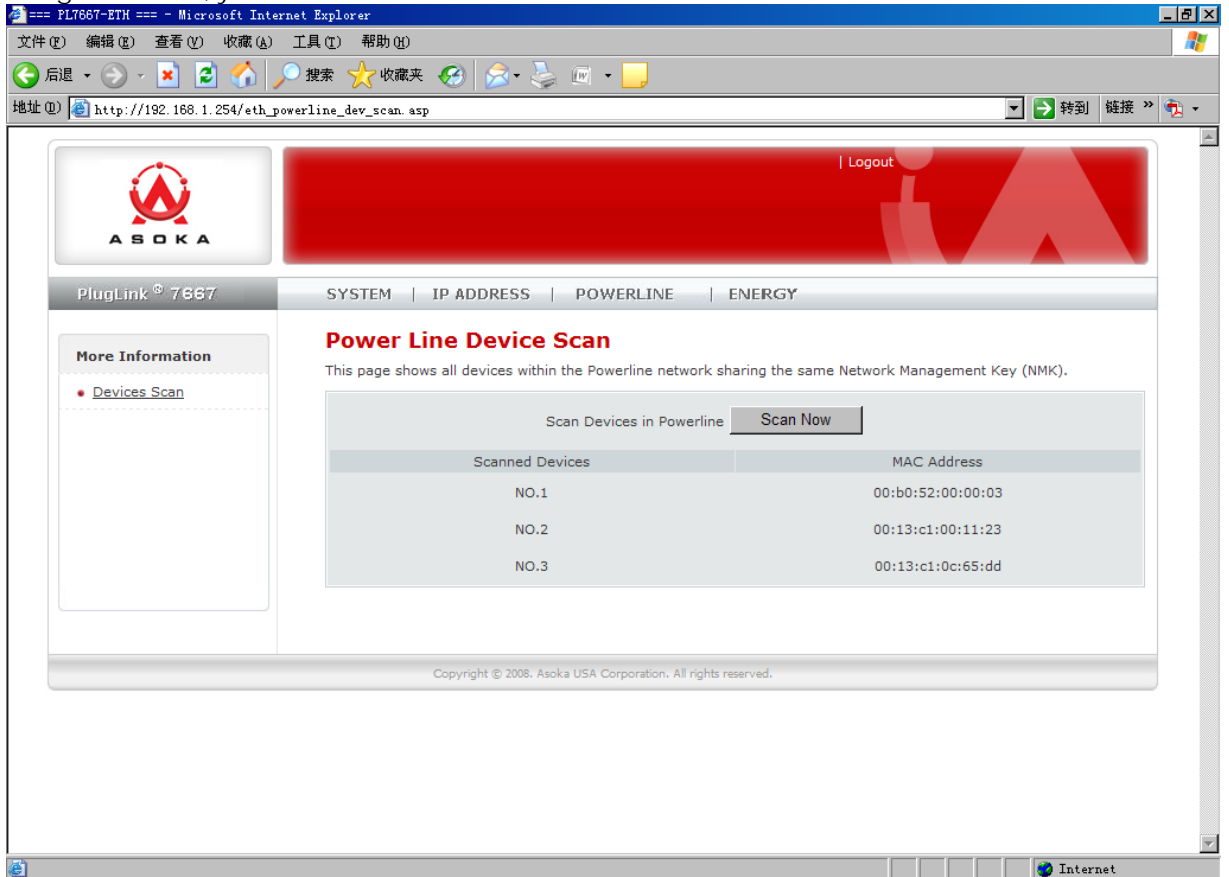


Figure 8-2: Three devices of PLC

### Notes:

1. The other devices already in the Power line network with the proper NEK are not affected and do not need to be reconfigured.
2. If you disconnect power from any device, its NEK value will remain and will not default back to "HomePlugAV" NEK.
3. An adapter can only generate a private key once. To replace a private key, first reset the unit back to its factory defaults by pressing the Firmware Default Reset (FW RST) button for 1 second, then follow the procedure above.

## Appendix A

# Default Settings

### **Login and Password:**

User Name: admin

Password: welcome

### **IP Setting:**

IP Address: 192.168.1.254

Subnet Mask 255.255.255.0

# FCC Notice

## FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct

The interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help

This device complies with Part 15 of FCC Rules.

Operation is subject to the following two conditions:

This device may not cause harmful interference, and

This device must accept any interference received, including interference that may cause undesired operation

## FCC RF Radiation Exposure Statement

**Note:** The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. such modifications could void the user's authority to operate this equipme.

Asoka USA Corporation  
2620 Augustine Drive Suite 230  
Santa Clara, CA 95054 USA  
Phone: (408) 550-8167  
Fax: (408) 884-2390  
[www.asokausa.com](http://www.asokausa.com)

URL: [www.asokatech.com](http://www.asokatech.com)