# NUCLEUS™

# **ENERGY MANAGER**

**Operating Instructions and Limited Warranty** 

#### **NUCLEUS™ OVERVIEW**

The Nucleus<sup>™</sup> energy manager (Nucleus<sup>™</sup>) provides you with the insight to make better energy decisions that will reduce your energy consumption and save you money. The Nucleus<sup>™</sup> does this by communicating with your utility's Smart Meter to show your total energy consumption in kilowatt hours (kWh) as reported to your utility. It also provides you with an estimate of the cost of that total energy (this estimate will vary from your actual bill because it is established on base pricing for electricity and does not include the taxes, surcharges and recovery fees added by your utility when it calculates your monthly bill).

Use the Nucleus<sup>™</sup> to become better educated about your home energy consumption. Measure a device's power and approximate cost to operate with the Nucleus<sup>™</sup> while you experiment turning electricity-consuming devices on and off in your home. Also use it to track your daily approximate energy consumption as you work towards your energy savings goals. Knowledge of your energy consumption and the related costs of operation can assist you in making better choices about how to spend your energy dollar.

In addition, the Nucleus<sup>™</sup> can also provide an estimate of the energy consumed and the cost to operate other connected Brillion<sup>™</sup>-enabled devices, such as appliances and thermostats. These estimates, based upon GE product testing (which may be at variance from your actual energy consumption due to installation and usage differences) provide great insight into the energy required to run a load of dishes or to keep your refrigerator cold – information that can assist in pointing the way to energy savings. For example, by knowing the approximate cost of running a load of laundry, you can better appreciate the value of running only full loads. Use the Nucleus<sup>™</sup> as your tool for discovering ways to save energy, reduce costs and decrease your carbon footprint.

**Before you begin** – Read these instructions completely and carefully.

For your safety – Read and observe all information in this manual.

**Note to Consumer** – Keep these instructions with your Quick Start Guide for future reference.

**Completion time** – about 1 hour

# IMPORTANT SAFETY INSTRUCTIONS WARNING:

#### RISK OF ELECTRICAL SHOCK OR FIRE. MAY CAUSE INJURY AND/OR DEATH.

- Operate this device only at the specified voltage and frequency as indicated on the Nucleus<sup>™</sup> product label.
- When connecting or disconnecting this device, always hold it by its sides. Keep fingers away from the metal part of the plug.
- This device is a high-voltage component and therefore should not be opened for any reason. No user-serviceable parts are located inside the device.
- This device is not intended for use in bathrooms, laundry areas, or similar indoor high humidity locations.
- Keep this device away from all liquids.
- Unplug this device from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

#### **NOTICE:**

- This device shall only be used for its intended purpose as described in this Owner's Manual.
- Never force a connector into the Ethernet port. If the connector does not attach with a reasonable amount of force, they do not match. Verify the connector matches the port and that it is oriented correctly.
- During standard use of this device, it is normal for the case to get warm. The case functions as a cooling surface that transfers heat from inside the unit to the cooler air outside.
- The only way to turn off power to this device is to unplug it from the electrical outlet

# SAVE THESE INSTRUCTIONS

# SYSTEM REQUIREMENTS

In order to install the Nucleus<sup>™</sup> energy manager, you must have the following:

# **Meter Requirements**

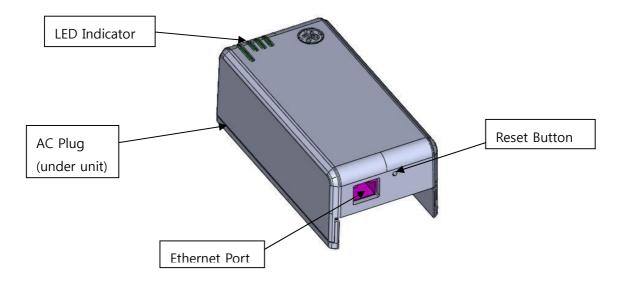
• AMI Zigbee™ Smart Energy Meter. Consult your local electricity provider to determine if the technology is available in your area.

# Operating System Requirements

- Processor: Intel Pentium III 1 GHz or faster, Intel Core Duo 1.83 GHz or faster.
- PC: Windows 7, Vista Home or Business with SP1, XP Home or Professional with SP3.
- Macintosh: Mac OS 10.4, 10.5, or 10.6
- Ram: 512MB Minimum, 1GB Recommended
- CD or CD/DVD drive.

## **Network Requirements**

- A router is required in order to access the Nucleus<sup>™</sup> energy manager on multiple home computers.
- In order to access the Nucleus<sup>™</sup> energy manager via wireless network, the computer must have a compatible 802.11 b/g wireless adapter



## **AC Plug**

Provides power to the Nucleus<sup>™</sup> energy manager.

#### **Ethernet Port**

The Ethernet Port is used to connect to an existing Ethernet Network.

#### **Reset Button**

This button is used to cycle power and also reset the password and network parameters of the Nucleus<sup>™</sup> energy manager.

## **LED Indicators**

These indicators are used to represent system status and will provide diagnostics in the unlikely

event of a system malfunction

#### **INSTALLATION INSTRUCTIONS**

Insert the CD into the computer's CD-ROM drive.

Click "Setup Nucleus™ energy manager". If you do not see this screen, access the setup CD directly. To do so, perform the following steps for your specific operating system:

#### • Windows 7

Go to START then COMPUTER. Double click on your CD-Rom drive.

## Windows Vista

Go to START then COMPUTER. Double click on your CD-Rom drive.

#### Windows XP

Go to START then MY COMPUTER and select your CD-ROM drive. Double click on SETUP.EXE.

#### MAC OS X

Double click the CD on your desktop. Double click on SETUP.

Follow the steps as outlined in the Getting Started Installation CD.

#### **CARE AND CLEANING**

First unplug the Nucleus<sup>™</sup> energy manager, then wipe the module surface with a clean, damp cloth as needed. DO NOT submerse or hold under running water.

#### **IMPORTANT NOTE:**

## **FCC RF Radiation Exposure Statement:**

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

#### REGULATORY INFORMATION

# FCC Compliance Statement

conditions. (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This product has been tested and found to comply with the limits of a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and if not installed and used according to 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 is found 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:

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment or devices.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult a dealer or experienced radio/TV technician for assistance.

  FCC CAUTION: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment

# **Limited Warranty for GE Nucleus™ Energy Manager.**

#### **WARRANTY**

Your use of the GE Nucleus<sup>™</sup> energy manager ("Hardware"), online product registration of the Hardware, or your return of the enclosed Registration Card acknowledges that you have read and agree to the terms of this warranty agreement. GE's warranty obligations for this Hardware are limited to the terms set forth herein.

GE warrants that this Hardware shall be free of defects in materials and workmanship under normal use for a period of one (1) year from the date of original retail purchase ("Warranty Period"). If a Hardware defect arises and a valid claim is received within the Warranty Period, your sole and exclusive remedy will be for GE, in its sole discretion and to the extent permitted by law, to (1) repair the Hardware defect at no charge, using new parts or refurbished parts that are equivalent to new in performance and reliability, (2) exchange the Hardware with Hardware that is new or refurbished that is equivalent to new in performance and reliability and is at least functionally equivalent to the original Hardware, or (3) refund the purchase price of the Hardware. Any repaired or replacement Hardware will be warranted for the remainder of the original warranty period or thirty (30) days, whichever is longer. In order to receive the remedy set forth above, you must contact GE during the Warranty Period at 800-220-6899 and provide the model number, serial number, date of purchase and MAC ID number of the Hardware. Upon GE's determination that the Hardware should be returned to GE, return the Hardware and include with each returned Hardware (i) a copy of your original purchase invoice or receipt to verify your warranty; (ii) your name, address, and telephone number; and (iii) the Return Materials Authorization (RMA) number. You are responsible for properly packaging and shipping the Hardware to GE at your cost and risk.

In addition to the foregoing Hardware warranty, for a period of ninety (90) days from the date of original retail purchase, GE shall also provide telephone (800-220-6899) and web chat (www.gebrillion.com) technical support assistance.

Please note that the above warranty obligations of GE do not include any in-home installation or service.

Important: Do not open the Hardware. Opening the Hardware may cause damage that is not covered by this warranty. Only GE or a GE authorized service provider should perform service on this Hardware.

TO THE EXTENT PERMITTED BY LAW, THIS WARRANTY AND THE REMEDIES SET FORTH ABOVE ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, REMEDIES AND CONDITIONS, WHETHER ORAL, WRITTEN, STATUTORY, EXPRESS OR IMPLIED, AS PERMITTED BY APPLICABLE LAW, GE SPECIFICALLY DISCLAIMS ANY AND ALL STATUTORY OR IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND WARRANTIES AGAINST HIDDEN OR

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# **Limited Warranty for GE Nucleus™ Energy Manager (continues)**

EXCLUSION OF IMPLIED WARRANTIES—This warranty applies only to the Hardware manufactured by or for GE that can be identified by the "GE" trademark, trade name, or logo affixed to it. This warranty does not apply to any non-GE Hardware or any software, even if packaged or sold with the GE Hardware. Software distributed by GE with or without the GE brand name (including, but not limited to system software) is not covered under this warranty. Refer to the End User Licensing Agreement accompanying the software for details of your rights with respect to its use.

GE does not warrant that the operation of the Hardware will be uninterrupted or error-free.

GE is not responsible for damage arising from failure to follow instructions relating to the Hardware's use.

This warranty does not apply: (a) to consumable parts, such as batteries, or protective coatings designed to diminish over time unless failure has occurred due to a defect in materials or workmanship; (b) to cosmetic damage; (c) to damage caused by use with non-GE products; (d) to damage caused by accident, abuse, misuse, liquid contact, fire, earthquake or other external causes; (e) to damage caused by operating the Hardware outside the permitted or intended uses described by GE; (f) to damage caused by service (including upgrades and expansions) not performed by GE, a GE-authorized service provider, or an authorized representative of GE; (g) to a Hardware or a part that has been modified to alter functionality or capability without the written permission of GE; (h) to defects caused by normal wear and tear or otherwise due to the normal aging of the Hardware; (i) if any GE serial number has been removed or defaced; or (j) to damage caused by or via the network on which the Hardware is used including, but not limited to, any online intrusion or attack.

EXCEPT AS PROVIDED IN THIS WARRANTY AND TO THE MAXIMUM EXTENT PERMITTED BY LAW, GE IS NOT RESPONSIBLE FOR DIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY BREACH OF WARRANTY OR CONDITION, OR UNDER ANY OTHER LEGAL THEORY, INCLUDING BUT NOT LIMITED TO LOSS OF USE; LOSS OF REVENUE OR ACTUAL OR ANTICIPATED PROFITS OR SAVINGS; LOSS OF, DAMAGE TO, COMPROMISE OR CORRUPTION OF DATA; OR ANY INDIRECT OR CONSEQUENTIAL LOSS OR DAMAGE HOWSOEVER CAUSED INCLUDING THE REPLACEMENT OF EQUIPMENT AND PROPERTY AND ANY COSTS OF RECOVERING, PROGRAMMING OR REPRODUCING ANY PROGRAM OR DATA STORED IN OR USED WITH THE GE PRODUCT. THE FOREGOING LIMITATION SHALL NOT APPLY TO DEATH OR PERSONAL INJURY CLAIMS, OR ANY STATUTORY LIABILITY FOR INTENTIONAL AND GROSS NEGLIGENT ACTS AND/OR OMISSION.