Introduction

The Invensys RF Gateway is a high performance wireless broadband server that is a central part of the Invensys GoodWatts system.

In addition to basic product description, this document provides specifications and specific instructions for setup.

Note: This equipment has been tested and found to comply with the limits for 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 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.

Caution: This equipment is authorized for use under the United States Federal Communication Commission Rules and Regulations, Code of Federal Regulations Chapter 47 part 15 and must be installed in accordance with the instructions provided in this document. Failure to install or operate this equipment as instructed in this document could void the user's authority to operate the equipment. This equipment contains no user serviceable parts. Any modification or repairs to the internal components or to the antenna configuration of the equipment without the express written consent of Invensys Home Control Systems could void the user's authority to operate the equipment.

FIGURE 1. *Invensys RF Gateway*

Note: To comply with FCC RF exposure requirements in section 1.1307, a minimum separation distance of 20 cm (8 inches) is required between the antenna and all persons.
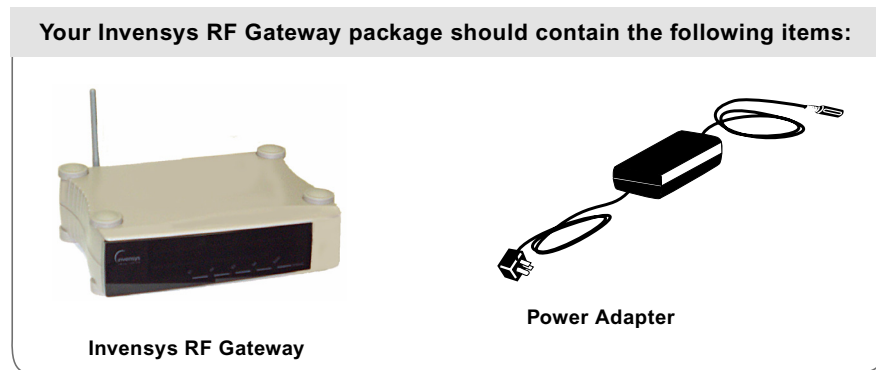
Inspection

Inspect the product carton for damage. If damaged, notify carrier immediately. Inspect Invensys RF Gateway for damage. Return damaged products. Check that the contents includes all components, as listed below and shown in *FIGURE 2. Invensys RF Gateway Components*:

- Invensys RF Gateway
- Power adapter

PRELIMINARY DOCUMENT

FIGURE 2.   *Invensys RF Gateway Components*

Your Invensys RF Gateway package should contain the following items:

Power Adapter

Invensys RF Gateway

Installation

Before you begin installation, please confirm the following system requirements are met and check that possible conflicting applications are addressed:

Location

The Invensys RF Gateway is an Energy Star compliant low power consumption, "always-on" server appliance. Proper location and setup of the device is essential for achieving top performance and longevity. The Invensys RF Gateway should be situated in a clean, flat, stable, open environment with adequate ventilation and isolated from any forms of moisture, dust and contaminates. Placement of the device on or near a desktop or industrial shelving is recommended, however, placement within a wiring closet or wall mounting (professional installation recommended) are also viable alternatives.

Connections

The following section provides instructions for connecting to the Internet and the procedural steps for applying power to the gateway.

FIGURE 3.   *Invensys RF Gateway connections*
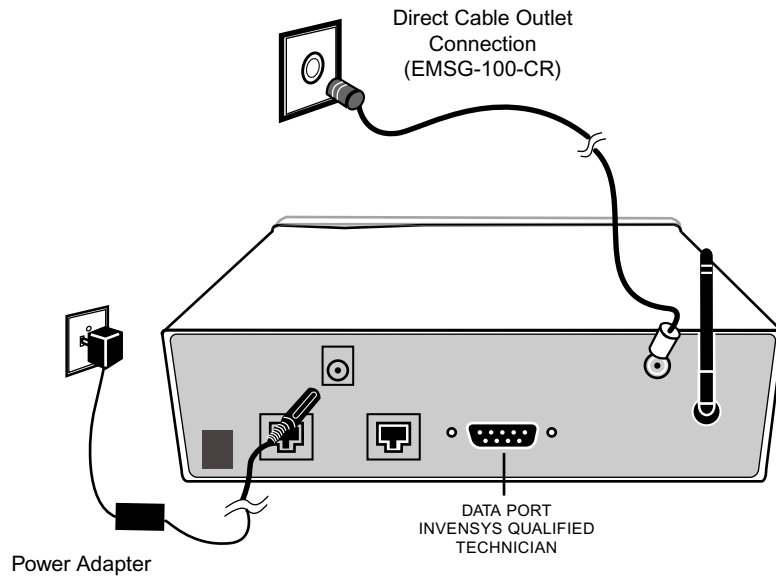
1. Refer to *FIGURE 3. Invensys RF Gateway connections*, and connect your Invensys RF Gateway to the Direct Cable Outlet Connection, as shown.

2. Plug the supplied power adaptor into the DC connector on the back of the Invensys RF Gateway and insert the power plug into a wall socket with surge protection.

Note: There is NO power switch located on the Invensys RF Gateway unit. The unit is "on" when you plug it in to a power outlet. Turning the gateway "off" is controlled via the gateway software or by unplugging the power adapter.

3. The Invensys RF Gateway will automatically run a 2-3 minute sequential self-test. The LED light located on the front of the gateway will indicate the status of the process, starting from a green blinking light through a solid green light if every test passes.

Note: You may see a very subtle orange blinking over the Solid Green light when the data is processing

4. Follow the LED readouts and proceed accordingly. Refer to *TABLE 1. LED indicator descriptions* for a listing of light indications.
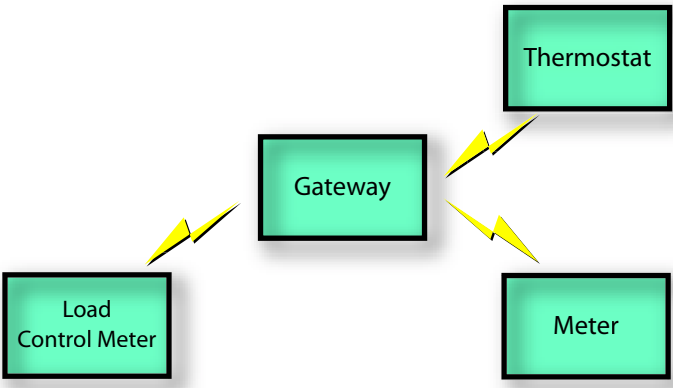
TABLE 1. LED indicator descriptions

LED Status	Indication	Action
Green Blinking (1 blink)	Process basic hardware testing	Wait for LED status change
Green Blinking (2 blinks)	Process extensive hardware testing	Wait for LED status change
Green Blinking (3 blinks)	Process software testing	Wait for LED status change
Green Blinking (4 blinks)	Indicates Internet (WAN) connection needs configuration via Invensys RF Gateway software	Contact Technical Support
Solid Green light	Indicates Internet (WAN) connectivity is complete	No action necessary
Red Blinking	An internal failure has occurred	Contact technical support

Operation

The Invensys RF Gateway is pre-configured to automatically use the WAN interface for connecting to the GoodWatts.com server. After a connection is made, the home-specific information is downloaded into the gateway and the RF device network is started, as shown in *FIGURE 4. GoodWatts RF device network*.

FIGURE 4.   *GoodWatts RF device network*