

Smart Energy Management System

SEMS



Quick Start Guide

Introduction



The Inergy Systems Smart Energy Management System (SEMS) is a home automation system that focuses on energy management and control. The SEMS connects to energy monitoring and control devices using Z-Wave, a low-power, secure, high-reliability mesh networking technology. Z-wave, along with other Z-wave certified devices, allows real-time monitoring of electrical power flowing into and out of a home, generated by a solar array or a battery, and loads such as heating and air conditioning systems, clothes dryers, electric water heaters, and more. Additionally, the SEMS can connect to utility meters that utilize Zigbee Smart Energy technology simplifying installation. Real-time control is used to synchronize device operation so that energy is used steadily and at times when electricity costs are low and renewable energy generation is high.

The SEMS connects to Inergy Home Connect, an online and mobile app platform that allows users to set schedules, monitor their energy usage, and control devices, allowing for full comfort while saving energy. To achieve this, the SEMS can also connect to Wi-Fi networks, LTE (optional), and Ethernet.

Ecosystem

The SEMS connects to the following types of home energy devices.



The SEMS connects to Inergy Home Connect (IHC) via Wi-Fi, LTE (optional) or Ethernet for real-time monitoring and control.



Real-Time "Now"



Energy Summary



Solar Summary



Device Scheduling and Control



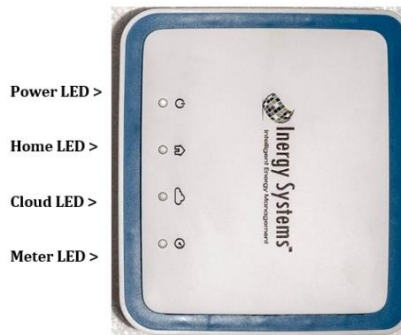
Package Contents

The product box contains the following items:

- SEMS hub
- AC/DC Power Adapter
- Z-wave Antenna
- LTE Antenna (optional)

Installation





Power LED:

Green – Booting.

Pulsing Blue – Operational, the unit is operating properly.

Home LED:

Blue – Operational, Blinks brighter momentarily when communicating with Z-wave devices.

Yellow – In Z-Wave Pairing Mode (Network Inclusion/Exclusion).

Cloud LED:

Blue – Operational, Blinks brighter momentarily when communicating with IHC.

Red – The unit is not connected to the cloud – Indicate challenge with Cellular.

Meter LED:

Blue – Operational, Blinks brighter momentarily when communicating with a power meter.

Yellow – Operation in Progress (i.e. the unit is pairing or attempting to pair to a meter).

Red – The unit is not paired with a meter.

Setup

Using a web browser, go to <https://my.inergysystems.com/> to setup your system and for more instructions.

In addition, download Inergy Home Connect Mobile for IOS or Android.



Specification

Dimensions:	5" x 4.5" x 1.25"
Weight:	5 oz.
Classification:	Tabletop
Environment:	Indoor Operational Only, 0-70°C
Power Supply:	<u>Included Class II Power Supply</u> Model: CUI SWI15-5-N-P5 Input Voltage: 90-260 VAC Input Current: 0.5A Max Input Frequency: 47 – 63 Hz. Integrated NEMA-1 Plug
Ports:	DC Input: 5.5MM DC Barrel, 5VDC +/- 10%, 2A Maximum Wired Ethernet: RJ-45 10 Mbps Ethernet Standard USB-A: Not used during normal operation. Micro-USB: Not used during normal operation. SMA: RF Connector LTE antenna RP-SMA: RF Connector Z-Wave antenna

Important Safety Information (RF Exposure)

This equipment contains multiple radio transmitters and receivers. When it is on, it receives and transmits RF energy automatically. This equipment complies with FCC radiation and exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum of 20cm between the radiators (equipment and antennas) and your body.

FCC Statements

SEMS Model: IH40, FCC ID: 2A93L-SEMS

Contains ICs: ZGM130S & RTL8188FTV (FG6188EUFX-05)

Contains FCC IDs: XFFZ357PA20 & N7NHL7648

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

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

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.