

Introduction

The eCommander is an Energy Management Controller that helps manage energy usage. The device provides a rich set of features such as the ability to communicate directly to a PLC based utility meter, monitor energy consumption, and control appliance modules. All communication between the eCommander, appliances and meter is performed using the existing powerline infrastructure -- requiring no extra cabling.

eCommander Device



Special Features for Utilities

- Remote commissioning of eCommander
- Ability to send messages to customer
- Ability to receive messages from customer (i.e. Opt in/Opt out)
- Secure encrypted communications
- Multiple access methods (WiFi and PLC)
- Flexible enough to incorporate other technologies
- One to one pairing with Meter
- Ability to Load Control within the home
- Ability to update via WiFi
- Supports different languages (English, Swedish and Finnish)]
- Ability to set the profiles to control the devices in a single touch

Features Overview

- View energy and cost data in real time over time
- Monitor current, past and estimated power
- Chart energy usage
 - 13 month Historical data stored
 - Perform comparisons
- Receive alerts
 - From utility
 - Based on energy targets
 - High consumption
- Connect to the Internet via WiFi
- Control lights/appliances connected to load control modules
- View energy for lights/appliance connected to load control modules
- View and Control remotely through internet and rich web interface
- Schedule On/Off of light/appliances
- View weather information
- Allows to control RF bulbs
- Use eCommander for more than energy
 - Alarm Clock
 - Internet Radio



eCommander SmartPlug

Plug in easily to existing standard wall outlets	Uncovers daily, weekly and monthly trends in energy consumption of individual appliances
Control the individual appliances from the IHD, smartphone or laptop	Track electricity rates and turn ON or OFF the high energy consumption appliances during peak

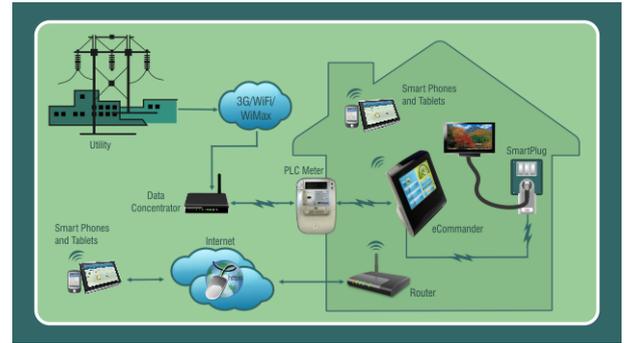
For more detailed information visit <http://energy.slscorp.com> or send us email to energy@slscorp.com



Perform Demand Response
with
eCommander & SmartPlug




In Grid Architecture



eCommander User Interface

The eCommander homepage shown below.



Web and Mobile Interface

The eCommander can be connected wireless to your iPhone and other WiFi enabled devices allowing you to control your appliances from any remote location.



Smart Homes have Smart Energy Management Controller

Homepage Walk Through

The screenshot shows a user interface for a Smart Energy Management Controller. It features a top status bar with date and time, a central energy usage gauge, and several data panels for energy consumption, carbon footprint, and temperature. A vertical sidebar on the right contains icons for device control, historical usage, current power usage, system tools, and the main dashboard.

Callouts and Descriptions:

- Top Left:** Displays the current date, time, weather information and power, energy
- Top Center:** Toggles the energy usage view to volumetric mode for daily, weekly, monthly and yearly energy usage
- Top Right:** Displays the instantaneous power consumption (w)
- Right Side (Top):** Displays the connectivity signal for selected network
- Right Side (Middle):** Displays the target and current energy usage bar as per the current energy usage view mode
- Right Side (Bottom):** Opens various application menu
- Bottom Right:** Displays the temperature for Outdoor and Indoor
- Bottom Center:** Displays the carbon dioxide value emitted in kilogram (kg) as per current energy usage view mode
- Left Side (Top):** Toggles the energy usage view to monetary mode for daily, weekly, monthly and yearly energy usage
- Left Side (Middle):** Allows to select the language for display
- Left Side (Bottom):** Displays the light control page for controlling the RF Bulb
- Bottom Left:** Displays the values for daily, weekly, monthly and yearly energy usage as per selection of volumetric and monetary view
- Bottom Left (Bottom):** Displays the Device profiles list to control the devices
- Right Side (Bottom):** Device control page for controlling the device
- Right Side (Middle):** Historical energy usage display in the form of bar graph for daily, weekly, monthly and yearly energy usage
- Right Side (Top):** Current Power usage bar graph display for individual device
- Right Side (Middle):** System Tools for managing and controlling eCommander
- Right Side (Bottom):** Home Energy Dashboard for current power and energy usage (displayed after registered with utility provider)

eCommander Technical Specifications

Model Number: SLS-REM-700

1. Electrical Specifications

Input Voltage Range	90 to 277 VAC +/- 10% - Single phase
Input Frequency	50 or 60Hz
WiFi communication	802.11b/g - 2.4 GHz
RF Communication	2.4 GHz
RF power	6dB = 3.9mW
Power Line communication frequency	Dual frequency – 115kHz & 132kHz

2. Display & Processor Specifications

Display	7 inch (178 mm) touch screen
Processor	800MHz Processor (AML8726-M3)
Memory RAM/Flash	256MB/4GB
Operating System	Linux
Display Graphics	Custom GUI
Battery type	3.7V 1000mA

3. Mechanical Specifications

Weight	500 grams
Power Plug	US/European/Chinese Cable
IP rating	In-home use
Size (L x W x H – length, width, height)	185 x 210 x 90 mm

4. General Specifications

Operating Temperature	0°C to 40°C
Storage Temperature	-20°C to +60°C
Operating Humidity	10-80% RH @ 40°C (non condensing)
Storage Humidity	5-95% RH max @ 40°C (non condensing)
Shock	30g @ 11ms; 100g @ 3ms (half sine)
EMC	ETSI EN 301 489-1 V1.9.2, ETSI EN 301 489-3 V1.4.1, ETSI EN 301 489-17 V2.2.1
WiFi Compliance	Yes
RF Standards	ETSI EN 300 328 V1.7.1, ETSI EN 300 440-2 V1.4.1.

For more detailed information visit <http://energy.slscorp.com> or send us an email to energy@slscorp.com

System Level Solutions

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