

# Energy Manager

## SPECIFICATION

The Enlighted Energy Manager provides a secure web-based interface to monitor, manage, and analyze energy savings and other data collected by the Enlighted Smart Sensor network. The Energy Manager translates data from the sensor network into detailed energy, temperature, and occupancy insights around the clock.



### OVERVIEW

The Energy Manager stores, performs analysis, and provides visual reporting of sensor data. In addition to being the collection point for energy, occupancy, and environmental data captured by the Enlighted Smart Sensors, the Energy Manager provides a web-based user interface for lighting system management and optimizing building system performance.

The Energy Manager (EM) manages up to 1500 individual sensors. It can also manage and control up to 3,500 BACnet points, which are available for purchase through the Lighting BACnet software license.

The Enlighted Energy Manager

Width	7.80"	198 mm
Height	1.65"	42 mm
Depth	5.71"	145 mm
Weight	2.64 lb	1.2 kg

### FEATURES

**Simplified Lighting Control Management:** The EM configures and manages lighting behavior by adjusting software profiles while retaining lighting data for up to 36 months. It generates reports on lamp and fixture outages, carbon reduction, energy and financial savings.

**Power Metering:** By deploying various control strategies at individual fixture level, direct power metering provides data for comprehensive savings analysis.

**Comprehensive Insight into Building System Performance:** Automatic Demand Response (ADR) and Demand Response (DR) optimize operating costs and comply with energy efficiency and sustainability goals. Measure and identify under-utilized spaces by gaining insight into building usage patterns.

**Standards-Based Communications Protocols:** Industry standard communication protocols provide robust and mature capabilities. REST-based APIs support GET and POST requests and XML, JSON responses. BACnet/IP enables integration between the Enlighted lighting network and Building Management System (BMS). The EM can turn on or off the Bluetooth radio.

**Data Security:** AES 128-bit encryption for wireless data transmission and TLS encryption for TCP/IP along with the use of a 2048-bit certificate and SHA-256 Cipher enable the highest standards of Corporate Data Security requirements.

**Flexible Deployment:** The server can be installed on an IT Corporate Network, dedicated Gateway Network, or as a stand-alone system. The intuitive graphical user interface is accessible via standard secure web browser, thus eliminating software downloading.

**Title 24 Compliance:** The Energy Manager simplifies the code compliance process by automatically setting profile parameter limits and automating certain tests that Title 24 requires. The software generates Title 24 compliance documents as the tests are evaluated and certified.

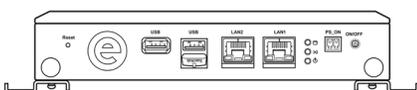
### ENLIGHTED SPECIFICATION SUBMITTAL

Job Name:

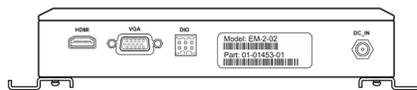
Job Number:

Product Codes:

- EM-2-02: EM with up to 1500 Sensors
- EM-ZNS-01: Add-on Single Zone Occ.
- ENCL-EM/FAN: EM and PoE Enclosure



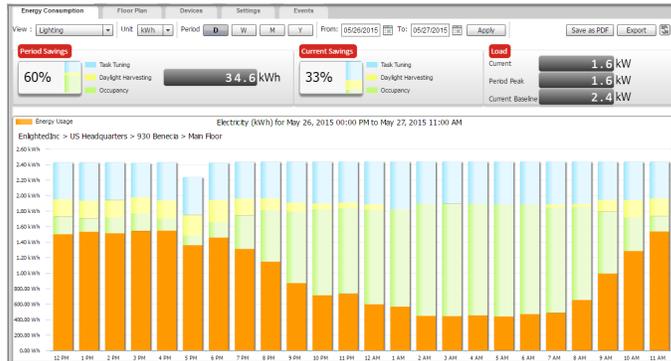
Front Panel



Rear Panel

# Energy Manager

## ENERGY SAVINGS



## MOUNTING

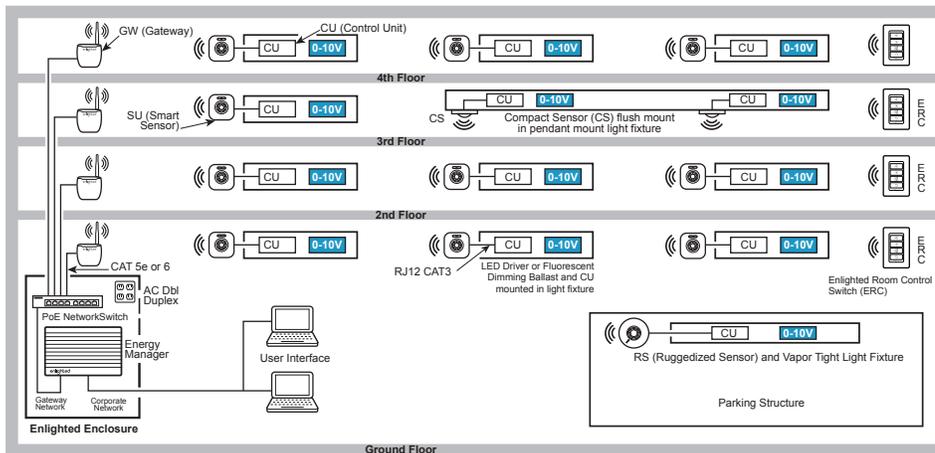
The Energy Manager is usually mounted in an electrical or telecom room in the Enlighted Enclosure with the PoE and a double duplex receptacle. RJ-45 connectors are included for the Enlighted system to connect to the Corporate and Gateway Network.



Enlighted Enclosure

## WIRING & OPERATIONS

The Energy Manager has two Ethernet ports: Eth0 and Eth1. The Gateway Network is connected to one of the Ethernet ports on the PoE Switch. The Corporate Network is connected to the client's IT network or the client's local computer. The software that resides in the Energy Manager can be accessed securely via a web browser, thus eliminating the need for clients to download any software.



## TECHNICAL SPECIFICATIONS

- Operating System:** Linux-based
- Web Client:** Chrome, Firefox, IE 10+
- Security:** TCP/IP Standards-based
- BACnet:** BACnet/IP
- Operating:** 32° to 131° F / -0° to 55° C
- Enclosure:** Ruggedized aluminum
- Power Supply input:** 120/240V 60W
- Power Supply output to EM:** DC 12V, 19W

## ORDERING INFORMATION

- EM-2-02 Energy Manager with up to 1500 Sensors
- EM-ZNS-01 Add-on License for a Single Zone Sensor for Occupancy
- ENCL-EM/FAN Enclosure for EM and POE

## COMPLIANCE

- Europe
- United States
- Canada

## Warranty: 5 years

Refer to [www.enlightedinc.com/limited-warranty-terms](http://www.enlightedinc.com/limited-warranty-terms) for complete terms and conditions