



# 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 (EM) 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 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.

### 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.

**Data Privacy:** The EM collects and stores occupancy data captured by the Enlighted sensors. The sensors cannot directly reference, distinguish or identify any natural person. The EM stores user's login and contact information including user name, email address, optional first and last names, tracks login and logout events, IP addresses, and application pages accessed by users. The EM also stores the organization's name, occupancy data, and floor plans.

**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.

### 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

### ENLIGHTED SPECIFICATION SUBMITTAL

Job Name:

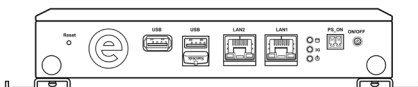
Job Number:

Product Codes:

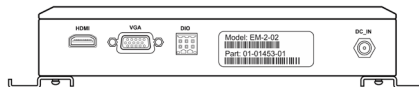
☐ EM-2-02: EM with up to 1500 Sensors

☐ EM-ZNS-01: Add-on Single Zone Occ.

☐ ENCL-EM/FAN: EM and PoE Enclosure



Front Panel

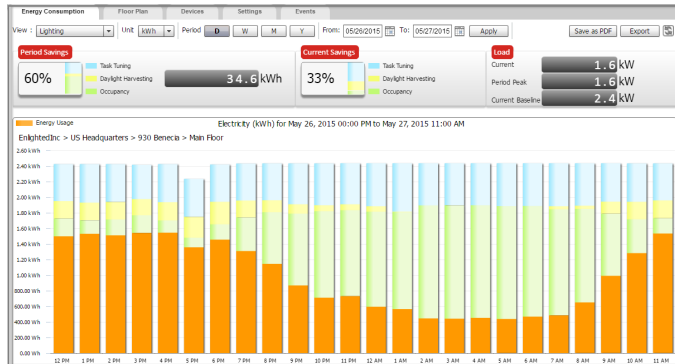


Rear Panel

# 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.

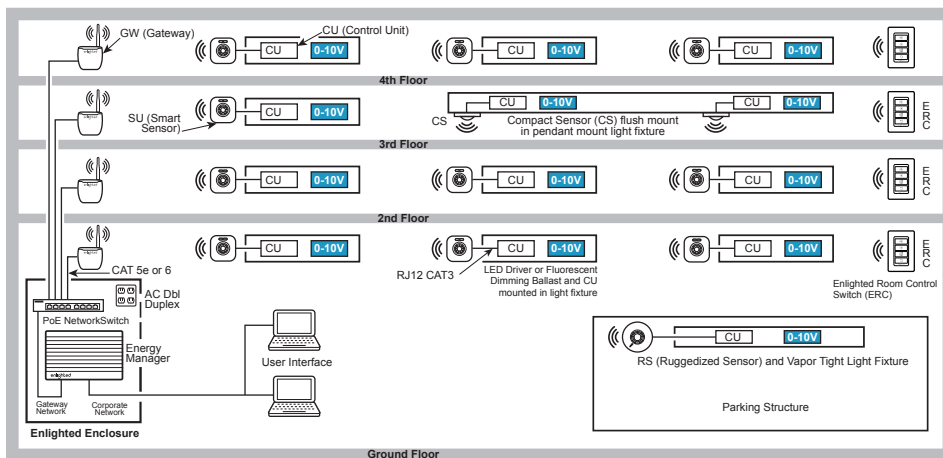
## WIRING & OPERATIONS

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.



The Enlighted Enclosure

Width	20.18"	512 mm
Height	24.18"	614 mm
Depth	6.06"	154 mm



## 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	CE RoHS REACH
United States	UL LISTED
Canada	UL LISTED

## Warranty: 5 years

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