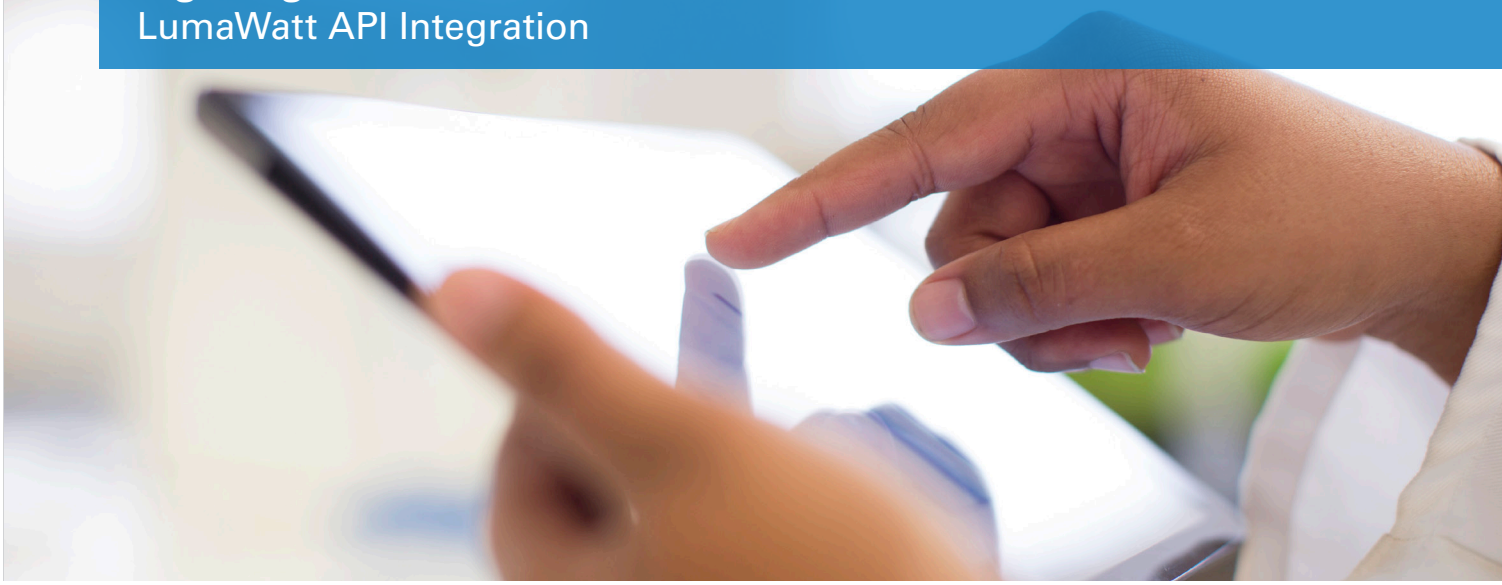

LumaWatt API Integration

Systems Addressed: LumaWatt Pro capabilities for API Integration with other systems.

What is an API?

Application Programming Interface (API) is one of the tools that developers and integrators can use to facilitate communication from one system to another. API integration provides the framework for an integrator or developer to write applications that will query and retrieve information from the LumaWatt System.

When should I request an integration using an API?

Depending on your project requirements the integration may or may not require an API integration. The LumaWatt system can integrate to BMS systems through BACnet integration. This method is the most common integration and will provide sufficient data for the majority of systems. BACnet integration provides the information that is exposed using an API, without the need to create new scripts to complete the integration. These scripts have already been developed and the points will be made available with the purchase of BACnet integration.

What kind of API do you support?

The LumaWatt Pro energy manager utilizes representational state transfer (REST) APIs through both XML and JSON formats. Scripts can be written using the REST APIs to query and retrieve information from the energy manager and would receive these responses in XML or JSON format.

What information can be obtained from an API integration?

On the following page is the list of some of the commonly requested information required from an API integration.

Requested Action	Information or Action Returned
Get Aggregate Energy Consumption	Returns the energy consumption in Watt-hours for all fixtures and plugloads managed by the energy manager over the last 15 minutes.
Get Area Outage Information	Returns the number of fixtures not functioning in the area along with the total number of fixtures available in the area.
Set Area Emergency Information	During an emergency, this command automatically sets the lighting level of all fixtures in the area to 100%.
Get Sensor Details	Returns the last known status of the fixture, reported in five minute intervals.
Get BACnet Health	The Lighting BACnet application, installed in the Energy Manager, uses this API to poll the Energy Manager to determine if BACnet is running or not.
Get All Fixtures by Area	Returns the fixture location for all fixtures on a particular floor, returning the data as X, Y coordinates.
Get Fixture Profiles	Returns the location for all fixtures in an area, represented as X, Y coordinates.
Assign Profile	Assigns a profile to the fixture.
Get Sensor Energy Consumption	Returns the energy consumed in Watt-hour by the fixture over the last 15 minutes.
Manual Override	Allows manual override of the fixture profile settings to dim the output from a fixture to a specific level for a specified period of time.
Auto Fixture Setting	Sets the sensors in Auto mode. In this mode, the level of occupancy in the area determines the fixture dim level.
Get Plugload Details	Details of the plugload status is returned.
Get All Plugloads by Area	Plugload details are returned for a specific area, returning the data in a graphical display as X, Y coordinates.
Get Plugload Energy Consumption	The API returns the managed and unmanaged energy consumed in Watt-hour by the plugload over the last 15 minutes.
Get Switch Groups	Groups used for lighting control are called switch groups. This API returns the switch group details at the floor or EM level.
Get Switch Scenes	Returns the virtual switch details including the name and list of scenes.
Get Scene Light Levels	Returns the details of the scene with each set of light level settings for fixtures.
Apply Scene	Applies a scene selection to all the fixtures of the switch for them to operate at the light level specified for that scene.
Manual Override	Allows manual override of the fixture profile settings associated with a switch to dim the output from a fixture to a specific level for a specified period of time.
Auto	The level of occupancy in the area determines the fixtures associated with the switch dim levels.
Get Switch Current Mode	Returns the current mode of the switch.
Schedule Demand Response	Allows a demand response to be scheduled for a specific period of time.
Cancel Demand Response	Cancels the currently running or scheduled demand response.
Update Demand Response	Update the existing running or scheduled demand response.
List Demand Response	Obtains a list of all running and scheduled demand response.
Get all BLE Fixtures by Floor	Returns the sensor location for all BLE sensors on a specified floor and returns that data as X, Y coordinates.
Set BLE Mode of Sensor	Sets the BLE mode of the sensor.

How to order the API information?

Contact your local agent and provide them with information about your project requirement needs. Eaton will evaluate the project requirements and determine whether an API integration is required or whether other methods for integration can be utilized. Should an API integration be required, an Eaton applications specialist will provide the appropriate access to the integrator and/or developers for your project.

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