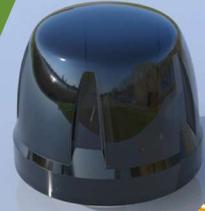


Mi-LUMENS

MIMOS Luminaires Monitoring Mesh Networks

Mi-LUMENS turns ordinary LED streetlight into intelligent one by enabling users to switch it on/off, adjust dimming levels and monitor its real-time operational state and power consumption from remote offices over the Internet. This ensures more efficient streetlight maintenance and management.



Technology Overview

Mi-LUMENS is a smart controller that eases the maintenance and management of LED streetlights. It allows the user to switch the streetlight on/off, adjust its dimming levels (for compatible LED streetlights), monitor its real-time power consumption and be alerted when the streetlight is faulty. All these operations are administered remotely over the Internet via an intuitive and user-friendly web dashboard. Mi-LUMENS uses 6LoWPAN, which is a low-power wireless network technology where each device has its own IP address. This allows the device to easily exchange data with remote hosts over the Internet or wireless local area network through a gateway. Communication between device and gateway uses sub-GHz ISM radio band (919-923MHz).

Technology Benefits

The benefits of Mi-LUMENS are:

Long Range Communication

Mi-LUMENS operates at sub-GHz frequency where signal absorption by the environment is less compared to its higher frequency counterpart. Thus, long range communication over difficult terrain and non-LoS condition is possible.

Less RF Interference

Compared to the 2.4GHz ISM band, the sub-GHz band is less crowded and relatively interference-free.

IP-based Low Power Wireless Mesh Network

Mi-LUMENS is a low power embedded device that can form an ad-hoc wireless mesh network and is able to communicate over the Internet via gateway. This allows the device to send and receive data with the cloud, as well as eases OTA firmware update.

Key Features

Mi-LUMENS comprise the following features:

Rated for 90-250 VAC, 50/60Hz

Support supply voltage of 90 to 250 VAC and maximum load current of 4A.

IP65 Outdoor Protection

Designed for outdoor use and harsh environments.

Operational State & Energy Consumption Reporting

Monitor real-time operational state & energy consumption (kWh, VARh, W, VAR, VA, PF) of individual streetlight.

Automatic, Remote & Scheduled On/Off Control

Autonomous operation based on light level sensor, as well as remote and scheduled-based on/off control over the Internet

Brightness Control for Optimal Energy Usage

Allows dimming of individual streetlight from remote locations based on timing profile, or external trigger such as motion sensor.

