

PRODUCT WHITEPAPER

OCCULIGHTS

All-in-one solution that visualizes occupancy status for all your meeting rooms



Visit us at

www.occulights.com

Occulights

Solution description

OccuLights is an all-in-one meeting room solution for occupancy, that involves our hub with an IoT motion sensor that accurately detects room occupancy and provides real time data on room utilization.

The busylight is triggered when people enter or leave the meeting room, giving clear visual indication on meeting room availability.



Find available rooms easily: Empower employees with our Meeting Room Occupancy solution, designed for user convenience, and a better overview of room availability. Occulights provides clear and instant indications on room occupancy through our vibrant busy lights. Employees can easily identify whether a meeting room is available or in use, optimizing their daily workflow, resulting in higher efficiency

Reduced interruptions: When a meeting room is occupied, the light outside turns red, signaling to others that the room is in use and should not be disturbed. This helps minimize interruptions and allows for focused work.

Efficient space management: By tracking room utilization through our portal, or through integration with your analytics platform, organizations can gain insights into how often meeting rooms are utilized and make informed decisions about space allocation and optimization.

Product Overview

Key features OccuHub

Our hub features a motion sensor that precisely detects room occupancy. It also includes temperature and humidity sensors to monitor indoor air quality. The hub controls busy lights for your meeting rooms and collects data on room usage. Easily connect multiple lights to one hub and enjoy a seamless setup with our multi-room deployment feature.



Key Features OccuHub

- Real-time room utilization detected by built-in motion sensor
- Instant visualization of room availability in the office
- Real-time data on indoor air quality
- Ceiling and wall-mount options
- Multi-sensor with open API
- Powered by PoE (Power over Ethernet) or USB-C
- GDPR compliant, handling only metadata
- No programming required, ready out of the box
- Multi-room deployment
- Quick setup in a few minutes
- WIFI-enabled deployment
- Setup via mobile or computer"

Product Overview

Key features OccuLight

OccuLights responds when people enter or leave meeting rooms, providing clear, real-time indications of room availability. The vibrant busy lights make it easy to identify whether a room is in use or available, resulting in more effective and productive workflow in the office



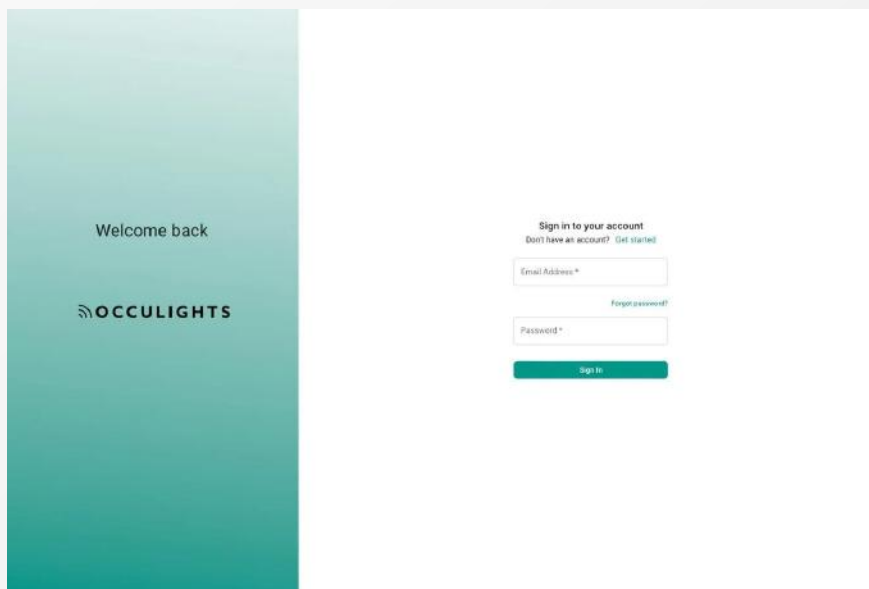
Key Features OccuLight

- Clearly indicates room availability from a distance.
- Exclusive and modern design
- Customizable response times to suit your needs
- Powered Over Ethernet (PoE)
- Integrate with other analytics platforms, workspace solutions and booking systems

Product Overview

Key features OccuPortal

Our solution has open API and you can visualize data through your preferred analytics platform such as PowerBI or other workspace applications. We have also made a platform that allows you to visualize data, monitor and administrate your devices. Configuration of Occulights and OccuHub through our cloud based OccuPortal.



Key Features OccuPortal

- Device monitoring
- Device administration
- Light and Hub configuration
- Cloud - based access

Installation Guide

Detailed, easy-to-follow installation instructions ensure a hassle-free setup, eliminating the need for costly, time-consuming configuration and programming.

Welcome effortless setup with OccuLights.

Step 1: Connect the light to the PoE power.

Step 2: Connect the Hub to PoE power or USB-C power.

Step 3: Open the Wi-Fi settings on your computer or mobile device.

Step 4: Locate the OCCUHUB + (MAC address). The Hub's MAC address is on two labels included in the package.

Step 5: Select the OCCUHUB you want to install; the Wi-Fi manager app will automatically open.

Step 6: Choose your local Wi-Fi network and enter the network credentials.

Step 7: If you have multiple OCCUHUBs, enter relevant IDs such as Organization ID, Location ID, Floor ID, and Room ID.

Step 8: The KIT (Hub and Light) will go online and sync within 6 minutes.



Compliance Certifications

Occulights meets all industry standards for safety and performance.



The CE marking indicates that Occulights' products meet EU standards for health, safety, and environmental protection, making them suitable for European markets.



FCC certification ensures Occulights' products comply with U.S. regulations on electromagnetic interference, confirming safe operation without disrupting other electronic devices.



IC certification confirms that Occulights' products comply with Canadian standards for radio frequency emissions, ensuring they are safe and reliable for use in Canada.



Technical Specifications

Power Source:

HUB: PoE or USB-C

Lights: PoE

Voltage:

3.0V - 3.6V

Average Consumption:

80mA (Idle) - 170mA (Wi-Fi TX)

Peak Consumption:

HUB: Up to 400mA

Lights: Up to 1000mA

Encryption for Communication:

ESP-Now (AES-128)

Internet Security Protocol:

WPA2-PSK

Wi-Fi Standard:

802.11 b/g/n

Frequency Range:

2.4 GHz

Flash Memory:

1MB to 16MB (depends on model)

Processor:

Tensilica L106 32-bit RISC

Analog-to-Digital Converter (ADC):

1 (10-bit)

Communication Protocols:

UART, SPI, I2C, I2S, PWM

Operating Temperature Range:

-40°C to 85°C

Dimensions:

HUB: 90mm x 90mm x 25mm (ESP-12E/F)

Lights: 50mm x 145mm x 30mm (ESP-12E/F)

Weight:

HUB: ~50 grams

Lights: ~120 grams

Estimated Range (Internal Antenna):

Up to 100 meters (line-of-sight)