

NS511 Zigbee Light

Wireless Illuminance Sensor

- 83k lux Illuminance Sensor
- Zigbee Wireless Connectivity
- Integrated battery
- Front facing solar panel
- Waterproof
- Indoor/Outdoor



Overview

The NS511 Light sensor is a versatile indoor/outdoor wireless illuminance sensor. It can easily integrate into an existing building control system. Connect the sensor to an existing Zigbee network. The light signal can be used to detect daylight for light harvesting and HVAC or shade automation.

Operation

The sensor can detect illumination either direct glare or indirect reflection. The field of view is 360 degrees which is suitable for ceiling, wall mount or window mount application. Place the sensor in a suitable location with line of sight to areas where illumination should be detected.

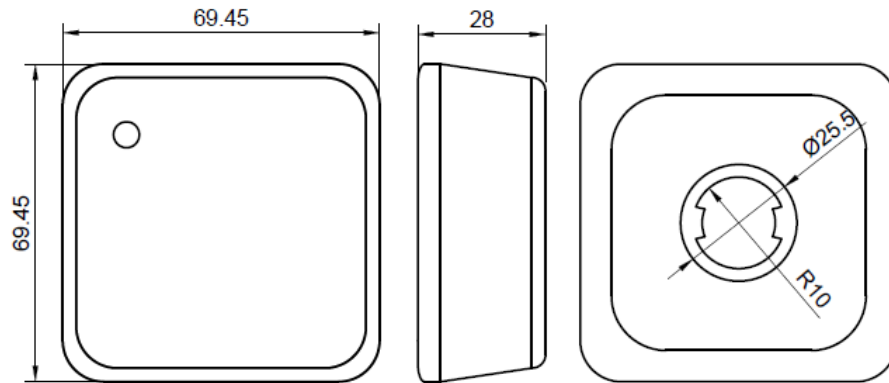
Illuminance data is sent when there is a significant value change to conserve battery. The host device receiving the data should buffer this value for persistence.

The sensor includes an integrated Ni-Cd battery and front facing solar panel. Place in direct sunlight to recharge. Without direct sun the battery will last up to 1 year of operation. With sunlight the battery recharges in 1 day.

The housing is waterproof. It can be installed outdoors and in damp locations. Install it inside or outside of a window to measure glare for shading applications. Or install it on a rooftop to measure total building illuminance. Best measurement results can be achieved when sensor is tilted normal to the average seasonal sun angle.

Product Features and Installation

The product is a small plastic enclosure that can be wall or ceiling mounted. The back mounting plate is removable. Separate the front housing from the back mounting plate. Then use screws or adhesive to secure the plate to the ceiling or wall surface. Reattach the front housing to the back mounting plate. The two pieces snap together without extra screws.



1 Product Dimensions

Join Button

Remove the back mounting plate. Locate the tactile push button switch. To join a Zigbee network press and hold the button for 6 seconds. The LED will be solid while holding and then change to flashing when join is activated. Release the button when the LED starts flashing. Permit joining the target Zigbee network coordinator. When the sensor joins the network, the LED will return solid. The sensor will time out if joining fails after 30 seconds. The LED will turn off after a successful or failed join to conserve battery.



2 Join Button and LED Indicator