

Monnit

Wireless LUX Sensor



Technical Overview

General Description

The wireless Lux Sensor measures the intensity of light in lux (luminescence/unit area), from 0 – 1000 lux (indoor range).

Features

- Measures the amount of light present.
- Highly sensitive photodiode.
- Free iMonnit basic online wireless sensor monitoring and notification system to configure sensors, view data and set alerts via SMS text and email.

Principle of Operation

The Wireless Lux Sensor uses a highly sensitive photodiode to detect and measure the intensity of light around the device. The sensor returns a value in “lux” to the iMonnit Online Sensor Monitoring and Notification System. The data is stored in the online system and can be reviewed and exported as a data sheet or graph. Notifications can be set up through the online system to alert the user when light is present or not with the ability to only notify within time of day parameters. Perfect for light sensitive applications like museum and art gallery light monitoring.

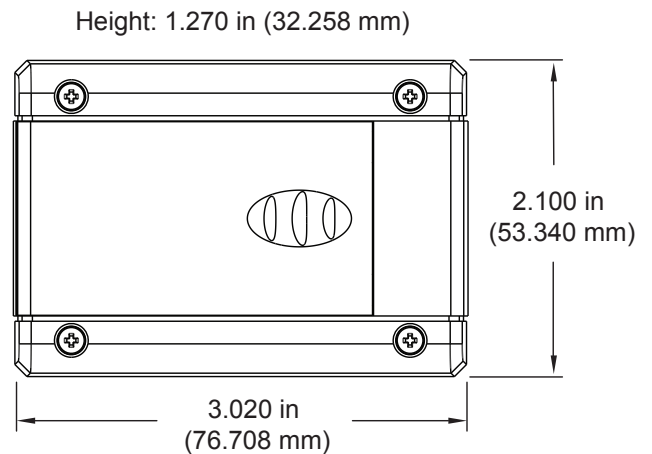
Example Applications

- Art gallery light metering.
- Museum light metering.
- Greenhouse and agricultural light monitoring.


Monnit Sensors Core Specifications

- Power: Replaceable AA batteries
- Communication: RF 900, 868 and 433 MHz
- Dimensions: 1.775” x 1.040” x 0.785”
- Antenna: 4” wire antenna
- Device Range: 250 - 300 ft. non-line-of-sight*
- Battery Life: At 1 hour heartbeat setting, AA batteries will last more than 4 years.**

* Actual range may vary depending on environment.
** Battery life is determined by sensor reporting frequency and other variables.



The Leader in Low Cost Wireless Sensors

Technical Specifications	
Supply Voltage	2.0 - 3.6 VDC *
Current Consumption	0.7 μ A (sleep mode) 2 mA (radio idle/off mode) 2 mA (measurement mode) 25 mA (radio RX mode) 35 mA (radio TX mode)
Electronics Operating Temperature	Using Alkaline AA Batteries: -18°C to +55°C (0°F to +130°F) Using Lithium AA Batteries: -40°C to +85°C (-40°F to +185°F)
Max Light Level	0 - 1,000 Lux
Certifications	 900 MHz product; FCC ID: ZTL- RFSC1 and IC: 9794A-RFSC1. 868 and 433 MHz product tested and found to comply with: CISPR 22:2008-09 / EN 55022:2010 - Class B and ETSI EN 300 220-2 V2.4.1 (2012-05).

- * Hardware can not withstand negative voltage. Please take care when connecting a power device.
- ** At temperatures above 100°C, it is possible for the board circuitry to lose programmed memory.

Caution/Notice:

This product is designed for application in an ordinary environment (normal room temperature, humidity and atmospheric pressure). Do not use this sensor under the following conditions as these factors can deteriorate the product characteristics and cause failures and burn-out.

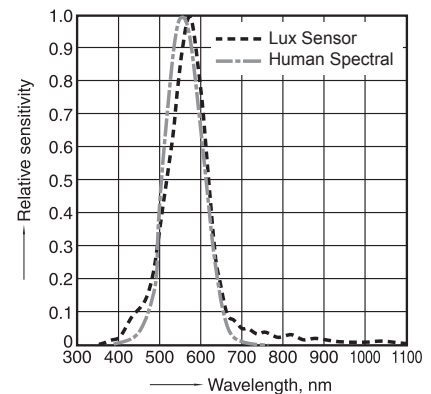
- Corrosive gas or deoxidizing gas - chlorine gas, hydrogen sulfide gas, ammonia gas, sulfuric acid gas, nitric oxides gas, etc.).
- Volatile or flammable gas.
- Dusty conditions.
- Under low or high pressure.
- Wet or excessively humid locations.
- Places with salt water, oils chemical liquids or organic solvents.
- Where there are excessively strong vibrations.
- Other places where similar hazardous conditions exist.

Use this product within the specified temperature range. Higher temperature may cause deterioration of the characteristics or the material quality of this product.

For more information about our products or to place an order, please contact our sales department at 801-561-5555.

Visit us on the web at www.monnit.com.

Relative sensitivity vs. wavelength
Ambient Temperature: 25°C (77°F)



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