

Light Level Sensor

EnOcean Light Level Sensor measures and reports the level of available natural light. Used in conjunction with suitable controllers such as EnOcean LEDR and LEDD, it enables implementation of energy saving daylight harvesting control systems.



Daylight harvesting is a great way to save energy and cost while enhancing worker satisfaction by allowing personal control of light levels.

Lighting control systems employing this technique measure natural light available in a building and only add as much artificial light as necessary.

Functional Principle

EnOcean Light Level Sensor uses a solar cell both to measure the amount of available natural light and to generate the required energy for its operation.

Natural light level is measured every minute and significant changes (> 50 lux) are transmitted immediately. In addition, a heartbeat message containing the current light level is transmitted at random intervals between 20 ... 30 minutes.

EnOcean Light Level Sensor is interoperable with other devices using the EnOcean Wireless Standard.

EnOcean Light Level Sensor can be quickly deployed without wiring and is maintenance free thanks to the ability to harvest the energy required for operation.

EnOcean Light Level Sensor is optimized for operation together with the EnOcean LED Controllers LEDD and LEDR.

Type
ELLS

Ordering Code
ELLSU-W-EO

Features overview

Power supply	Solar energy harvesting
Measurement range / resolution	0 ... 1020 lux / 4 lux
Typical accuracy	+ -5 % at full scale / 68°F
Measurement interval	1 minute
Transmission interval	Immediate if change > 50lux versus last transmission Heartbeat every 20 ... 30 minutes (affected at random)
RF standard	EnOcean 902 MHz
Transmission range	80 ft. (25m)
EnOcean Equipment Profile	A5-06-02
Dimensions	6.30" L x 2.36" W x 1.15" D (160 mm x 60 mm x 37 mm)
Weight	4.4 oz. (125 g)
Mounting position	At the ceiling, close to ambient light source (window)
Environment	Indoor use only / 32° to 140° F (0° to 60° C) 20% to 85% relative humidity (non condensing)
Agency compliance	FCC, IC, RoHS