

# Sigfox Ambient Light Sensor



Smart Agriculture, Smart Building, Smart City, Smart Facility, Smart Farm, Smart Factory

SKU: WSSFC-AL

## SIGFOX AMBIENT LIGHT SENSOR WSSFC-AL



sigfox

10-Year



Safe Zone

Hazardous Zones

WSSFC-AL is a Sigfox ambient light sensor with built-in the ultra low power light sensor that measures the intensity of visible light. The spectral response of the sensor tightly matches the photonic response of the human eye and includes significant infrared rejection. The precision spectral response and strong IR rejection of the device enables the AL sensor to accurately meter the intensity of light as seen by the human eye regardless of light source. Measurements can be made from 0.01 lux up to 83k lux without manually selecting full-scale ranges by using the built-in, full-scale setting feature. This capability allows light measurement over a 23-bit effective dynamic range. Ultra-low-power design and smart firmware allow the sensor to run on a 2 x AA battery 1.5V for 10 years with one update per day. It can support all RC zones.

### Applications

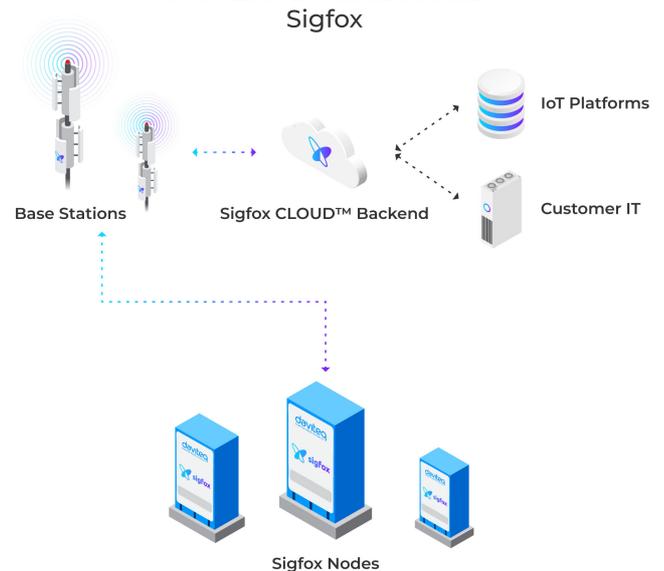
Facility Monitoring, Safety Monitoring

### Notes For Applications

Light Intensity Range: Choose a sensor with an intensity range suitable for the application. Power Consumption: Evaluate the power requirements of the sensor. Mounting Options: Consider the physical form factor and mounting options. Integration: Look for sensors that integrate well with your system.

- Sigfox Ready**  
Device are best operating performance on the Sigfox network
- Visible light measurement**  
Precision Optical Filtering to Match Human Eye, Rejects > 99% (typ) of IR
- 10-Year battery**  
Ultra-low power sensing technology from Daviteq with Ultra-low power wireless technology to allow the sensor can last up to 10 years with 02 x Type AA batteries.
- IP68**  
For both indoor and outdoor applications

## SYSTEM ARCHITECTURE



## DAVITEQ TECHNOLOGIES INC

Ho Chi Minh City, VN | Koblenz, DE | Melbourne, AU | Zurich, CH

+84.28.6268.2523 / 6268.2524

info@daviteq.com

[www.iot.daviteq.com](http://www.iot.daviteq.com)

Created date: Sep-30-2025

Updated date: Dec-03-2025

## Specification

MEASUREMENT MODULE	
Sensor technology	Light sensor with Precision Optical Filtering to Match Human Eye, Rejects > 99% (typ) of IR
Measurements range	0.01 lux to 83 k lux 23-Bit Effective resolution
Linearity	2% of Reading value for > 40 Lux, 5% of Reading value when the light is less than 40 lux
Temperature drift	0.01%/°C when light intensity is about 2000 lux
Operating Temperature Range	-40~85°C
COMMUNICATION	
Sigfox zones	Select RC1-RC2-RC3c-RC4-RC5 -RC6-RC7
Antenna	Internal Antenna 2.0 dbi
Battery	02 x AA Type 1.5VDC, working time up to 10 years (depends on configuration)
RF Module complies to	CE, FCC, ARIB
Working temperature	-40~60°C (using Energizer® Lithium Ultimate AA battery)
Housing/Protection	Aluminum + Polycarbonate/ IP67
Dimension	H130xW73xD42
Net weight	< 400g

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WSSFC-AL

APPLICATION FOR LIGHT MONITORING  
IN BUILDING & FACILITY MANAGEMENT



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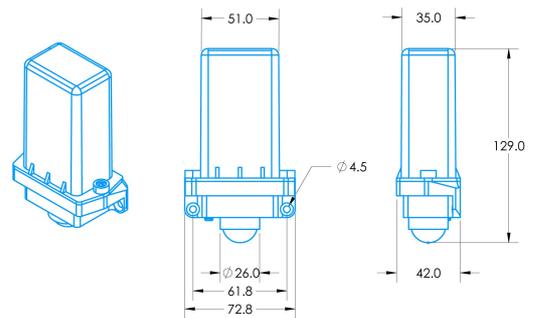
APPLICATION FOR LIGHT MONITORING  
IN AGRICULTURE & HORTICULTURE



**SIGFOX AMBIENT LIGHT SENSOR**  
WSSFC-AL

APPLICATION FOR LIGHT MONITORING  
IN MUSEUMS & ART CONSERVATION

**SIGFOX AMBIENT LIGHT SENSOR**  
WSSFC-AL



DIMENSION DRAWING OF  
WIRELESS NODE (Unit: mm)

**RECOMMENDED BATTERIES**



E91 AA  
Alkaline battery

-18~60°C working temperature  
10-year shelf life  
3000 mAh capacity  
Price: 1X



L91 AA  
Lithium battery

-40~60°C working temperature  
20-year shelf life  
3500 mAh capacity  
Price: 3.5X

POWERED BY PRIMARY BATTERY

**SIGFOX AMBIENT LIGHT SENSOR**  
WSSFC-AL



PRODUCT PACKAGE

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## Ordering Information

ITEM CODE	DESCRIPTIONS
WSSFC-AL-01	Sigfox-Ready ambient light sensor, integrated sensor with protection lens, IP68, AA 1.5V battery, fixed light sensor.

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