WIRELESS AMBIENT LIGHT SENSOR

WIRELESS AMBIENT LIGHT SENSOR
WS433-AL

1000m LOS

10-Year

IP67 WEATHERPROOF

WS433-AL-H1.PNG

WS433-AL is a wireless ambient light sensor, using the most advanced digital technology to bring high accuracy and stable measurement. The wireless portion is Sub-GHz technology from Texas Instruments allows long range transmission at ultra-low power consumption. It will connect 2-way wirelessly to the wireless co-ordinator WS433-CL to send data and receiving the configuration. It can be configured the operation parameters like data sending interval, health check cycle...remotely from Globiots platform or via ModbusRTU software (thru the WS433-CL). Its default data rate is 50 kbps, can be switched to 625 bps to increase the communication range. The sensor can last up to 10 years with a single AA battery. And it has many applications such as continuous measurement of ambient brightness to monitor the premises or control lighting in factories, greenhouses, etc.

✓ RELIABLE & SECURED WIRELESS CONNECTION
Sub-Ghz technology from Texas Instruments allows reliable wireless connection and secured data by AES-128

✓ 10-YEAR WITH A SINGLE BATTERY
Ultra-low power sensing technology from Daviteq with Ultra-low power wireless technology fromTexas Instruments allow the sensor can last up to 10 years with a single battery AA.

✓ PRE-CALIBRATED
Sensors are pre-calibrated at factory to deliver high accuracy and quick installation

✓ IP67
For both indoor and outdoor applications

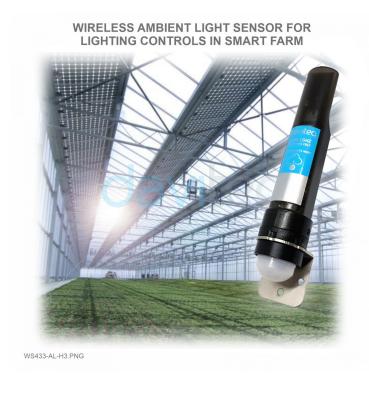WIRELESS AMBIENT LIGHT SENSOR FOR LIGHTING CONTROLS IN SMART FACTORY

WS433-AL-H2.PNG

SPECIFICATION

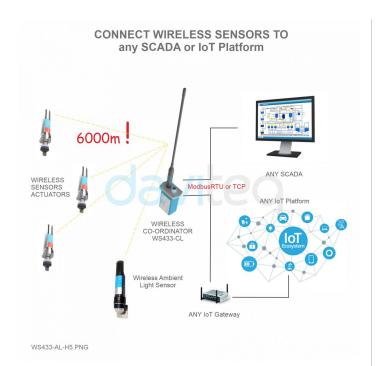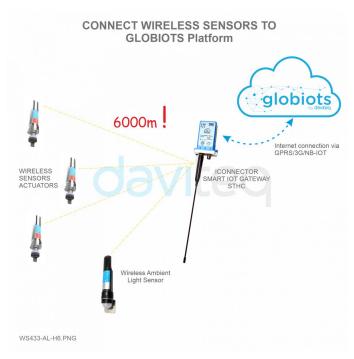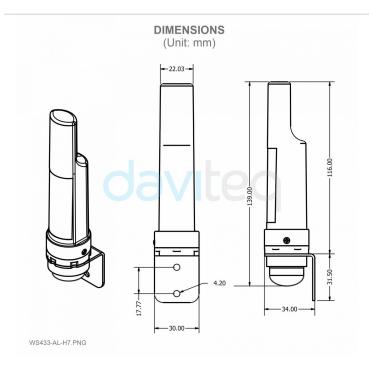| SENSOR SPECIFICATION :	
Ambient light intensity measurement feature:	
Unit	Lux
Measurement range	0..83865.6
Linearity	5% when the light is less than 40 lux
Temperature drift	0.01% / oC when light intensity is about 2000 lux
WIRELESS TRANSMITTER SPECIFICATION :	
Data speed	Up to 50kbps
Tranmission distance, LOS	1000m
Antenna	Internal Antenna
Battery	01 x AA 1.5-3.6VDC, up to 10-year operation, depends on configuration
Frequency Band	ISM 433Mhz, Sub-GHz technology from Texas Instrument, USA
International Compliance	ETSI EN 300 220, EN 303 204 (Europe) FCC CFR47 Part15 (US), ARIB STD-T108 (Japan)
Vietnam Type Approval Certification	QCVN 73:2013/BTTTT, QCVN 96:2015/BTTTT (DAVITEQ B00122019)
Security Standard	AES-128
Operating temperature of PCB	-40oC..+60oC (with AA L91 Energizer)
Housing	Poly-carbonate, IP67
Installation method	L-type bracket SUS304 , by M4 screws or double-sided 3M tape (included)
Product dimensions & weight	160x30x30mm, < 60g (without battery)
Box dimension & gross weight	190x50x50mm, < 90g

WIRELESS AMBIENT LIGHT SENSOR FOR LIGHTING CONTROLS IN SMART FARM

WS433-AL-H3.PNG

CONNECT WIRELESS SENSORS TO any PLC or HMI

WS433-AL-H4.PNG

CONNECT WIRELESS SENSORS TO any SCADA or IoT Platform

6000m !

WIRELESS SENSORS ACTUATORS

ModbusRTU or TCP

ANY SCADA

ANY IoT Platform

WIRELESS CO-ORDINATOR WS433-CL

IoT Ecosystem

Wireless Ambient Light Sensor

ANY IoT Gateway

WS433-AL-H5.PNG

CONNECT WIRELESS SENSORS TO GLOBIOTS Platform

6000m !

globiots
by daviteq

WIRELESS SENSORS ACTUATORS

ICONNECTOR SMART IOT GATEWAY STHC

Internet connection via GPRS/3G/NB-IOT

Wireless Ambient Light Sensor

WS433-AL-H6.PNG

DIMENSIONS
(Unit: mm)

22.03

139.00

116.00

17.77

4.20

31.50

30.00

34.00

WS433-AL-H7.PNG

RECOMMENDED BATTERIES FOR WIRELESS SENSOR WS433

E91 AA Alkaline battery

AA
Energizer

-18 .. + 60 oC working temperature

10-year shelf life

3000 mAH Capacity

Price: 1X

L91 AA Lithium battery

AA
Energizer ULTIMATE LITHIUM

-40 .. + 60 oC working temperature

20-year shelf life

3500 mAH Capacity

Price: 3.5X

WS433-AL-H8.PNG

ORDERING INFORMATION

ITEM CODE	DESCRIPTIONS
WS433-AL-01	Wireless ambient light sensor 433Mhz, AA 1.5 - 3.6VDC battery, IP67