Sigfox Ultrasonic Level Sensor for Trash bin ULB

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

SKU: WSSFC-ULB

daviteq

✓ Safe Zone   ◯ Hazardous Zones

SIGFOX ULTRASONIC LEVEL SENSOR FOR TRASH BIN WSSFC-ULA

10-Year

IP67 WEATHERPROOF

WSSFC-ULA-H1.PNG

WSSFC-ULB is a Sigfox-ready ultrasonic level sensor to measure solid surface level in trash bin for waste management systems... This level sensor uses ultrasonic technology to measure the solid surface of waste, the principle is to measure the time of flight of the ultrasound pulse in the air environment. The ultrasound pulse will be ejected from ultrasonic transducer, go thru the air and reach the solid surface of the waste, then reflected back to the ultrasonic transducer, the measuring circuit will measure the flight time of the pulse then calculated distance from the transducer to the surface. Ultra-low power design and smart firmware allow the complete Wireless and Sensor package to run on 2 x AA battery 1.5V for 5 years (depending on configuration). It can support all RC zones. Typical Applications: Monitoring the level of trash in the trash bin, solid waste & recycling facility,...

Applications
Waste Management, Process Monitoring, Safety Monitoring, Infrastructure Monitoring

Notes For Applications

✓ **Sigfox Ready**
Device are best operating performance on the SIGFOX network

✓ **5-Year battery**
Ultra-low power sensing technology from Daviteq with Ultra-low power wireless technology allow the sensor can operated up to 5 years with 02 x AA batteries

✓ **High Accuracy & Stable**
Advanced ultrasonic sensor with digital signal processing to deliver high accuracy and stable measurement of level or distance for solid surface of waste

✓ **Angle-adjustable mounting bracket**
Easy mounting in any trash bin design

LEVEL SENSOR INSTALLED IN THE TRASH BIN

WSSFC-ULA-H2.PNG

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Specification

Sensor	Ultrasonic sensor
Measurement range	300~4500mm
Resolution & accuracy	1.0mm, ±10mm
Sensor sampling rate	configurable from 10s up to 3600s
Alarm setting	setting the alarm threshold for calculated value
COMMUNICATION	
Sigfox zones	RC1~RC7
Antenna	Internal Antenna 2.0 dbi
Configuration	via Downlink or offline USB cable (PC software is supplied at free)
Battery	02 x AA Type 1.5VDC
RF Module complies to	CE, FCC, ARIB
Working temperature	-40~60℃ (using Energizer® Lithium Ultimate AA battery)
Dimensions	H180xW50xD40
Net-weight	250g
Housing	Polycarbonate & POM plastic, IP67
Mounting	Angle-adjustable mounting bracket

LEVEL SENSOR INSTALLED IN THE TRASH BIN

WSSFC-ULA-H3.PNG

MOUNTING ULA SENSOR ON LARGE TRASH BIN
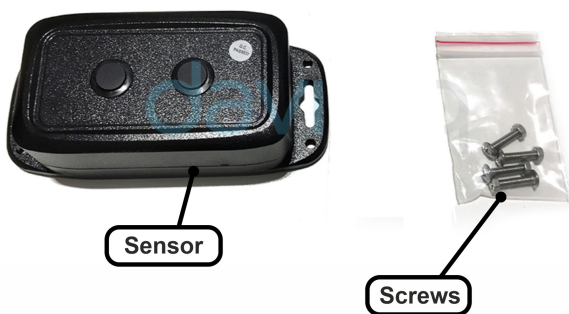

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SYSTEM ARCHITECTURE

IoT Platforms   Customer IT

Sigfox stations
Over 1 million messages can be processed per base station per day

Sigfox CLOUD™
Web interface
API
Callbacks

Sigfox Sensors

WSSFC-ULA-H5.PNG

DIMENSION DRAWINGS OF WIRELESS SENSOR
(Unit: mm)

43.00
154.00
68.20
41.30
25.35
135.00
R5.10
∅ 4.80
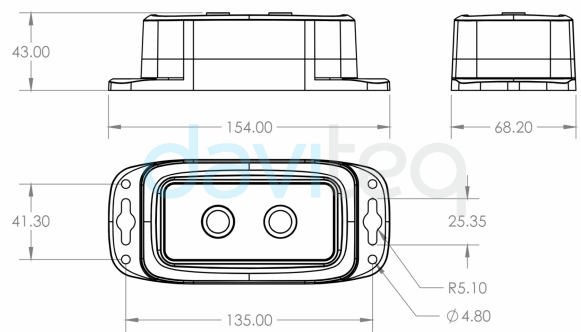
WSSFC-ULA-H6.PNG

WHAT'S IN THE PACKAGE?

Sensor

Screws

WSSFC-ULA-H7.PNG

RECOMMENDED BATTERIES FOR SIGFOX SENSOR

L91 AA Lithium battery

-40 .. + 60 oC working temperature

20-year shelf life

3500 mAH Capacity

Price: 3.5X

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Ordering Information

ITEM CODE	DESCRIPTIONS
WSSFC-ULB-01	Wireless Sigfox Ultrasonic Level Sensor for Trash bin, Internal antenna, 4500mm range, Type AA battery 1.5VDC, IP67, for all RC zones.