

SIGFOX READY ULTRASONIC LEVEL SENSOR FOR TRASH BIN



SKU: WSSFC-ULA

SIGFOX ULTRASONIC LEVEL SENSOR FOR TRASH BIN WSSFC-ULA



WSSFC-ULA-H1.PNG

WSSFC-ULA is a Sigfox-ready ultrasonic level sensor to measure the solid surface level in the 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 the following regions RC1, RC2, RC3c, & RC4.

Typical Applications: Monitoring the waste level in the trash bin, solid waste & recycling facility,...



SIGFOX-READY

Support RC1, RC2, RC3c, and RC4



ULTRA-LOW POWER WITH 5 YEARS 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



OUTDOOR & EASY CLEANING

IP68 design for both Indoor and Outdoor applications and easy cleaning



SUPPORT MULTIPLE TYPE OF INSTALLATION

The sensor comes with mounting accessories to allow installation inside or outside of the bin, in the horizontal or vertical direction.

LEVEL SENSOR INSTALLED IN THE TRASH BIN



WSSFC-ULA-H2.PNG

DAVITEQ TECHNOLOGIES INC

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SPECIFICATION

SENSORS SPECIFICATION:	
Sensor	Ultrasonic sensor 40KHz
Measurement range	3 .. 450 cm
Accuracy	+/- (1 cm + 0.5% giá trị đọc)
Resolutions	1mm hoặc 1/1000
Alarm setting	setting the alarm threshold for calculated value
Working temperature/humidity	-15 .. + 60 oC / 0 - 99% RH (non-condensing)
Storage temperature/humidity	-25 .. + 80 oC / 0 - 99% RH (non-condensing)
Transducer material	Ceramic
Sigfox SPECIFICATION:	
Sigfox zones	select RC1-RC2-RC3c-RC4
Antenna	Internal Antenna 2 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°C..+60°C (using Energizer Lithium Ultimate AA battery)
Dimensions	H154xW68xD43
Net-weight	250 grams
Housing	Polycarbonate, IP68

LEVEL SENSOR INSTALLED IN THE TRASH BIN



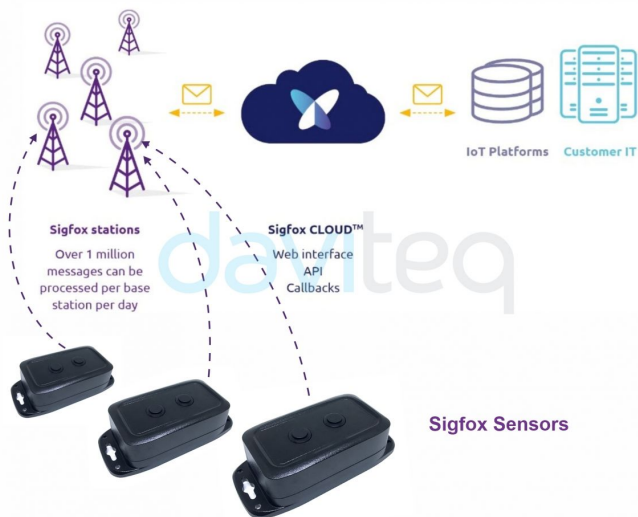
WSSFC-ULA-H3.PNG

MOUNTING ULA SENSOR ON LARGE TRASH BIN

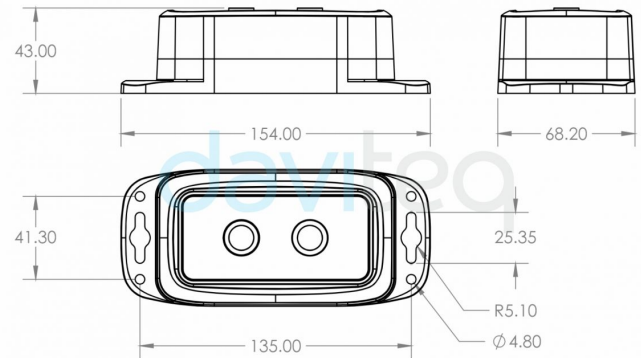


WSSFC-ULA-H4.PNG

SYSTEM ARCHITECTURE

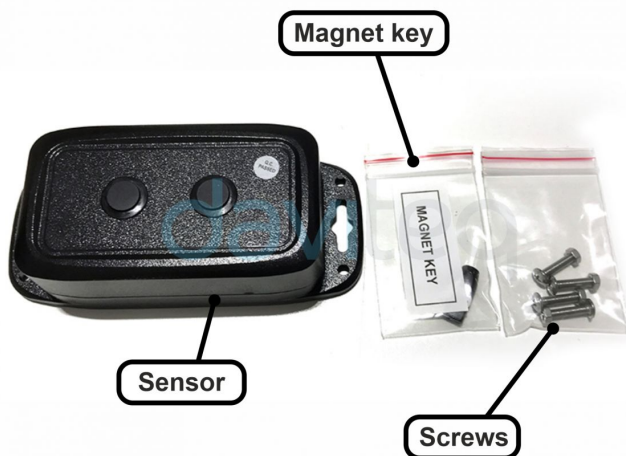


WSSFC-ULA-H5.PNG

DIMENSION DRAWINGS OF WIRELESS SENSOR
(Unit: mm)

WSSFC-ULA-H6.PNG

WHAT'S IN THE PACKAGE?



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

WSSFC-ULA-H8.PNG

ORDERING INFORMATION

ITEM CODE	DESCRIPTIONS
WSSFC-ULA-01	Wireless Sigfox-ready Ultrasonic Level Sensor for Trash bin, Internal antenna, 3-450cm range, Type AA battery 1.5VDC, IP68, RC1-RC2-RC3c-RC4 zones

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