

IOT-S500UDL-W045

Ultrasonic Distance Sensor



IOT-S500UDL-W045 is a LoRa ultrasonic distance sensor mainly for the detection of waste bin and other container's fill level. With a compact size and wide measure range, IOT-S500UDL-W045 can be installed to any types of waste bins or containers to monitor solid or liquid level. Besides, IOT-S500UDL-W045 equips with 3-axis accelerometer to detect the status of container cover.

Outstanding Features

- 3-450 cm wide measuring range with short blind zone
- Easy to install, suitable for various types of waste bins or containers
- Built-in 3-axis accelerometer sensor to monitor device tilt status
- IP67 waterproof and salt spray resistant enclosure for outdoor applications and easy to clean
- Ultra-wide-distance wireless transmission up to line of sight of 15 km
- Equipped with NFC for one touch configuration, support card emulation mode
- Function well with standard LoRaWAN gateways and network servers

Specification

Model	IOT-S500UDL-W045		
Wireless Transmission	Technology	LoRaWAN	
	Frequency	CN470/IN865/RU864/EU868/US915/AU915/KR920/AS923	
	Tx Power	16 dBm (868 MHz)/22 dBm (915 MHz)/19 dBm (470 MHz)	
	Sensitivity	-137dBm @300bps	
	Mode	OTAA/ABP Class A	
Measurement	Distance	Detection Range	1.18' -177" (3 - 450 cm)
		Detection Accuracy	$\pm 0.39(1+0.3\%*S)" (1+0.3\%*S) \text{ cm}$, S=distance
		Distance Resolution	0.039"(1 mm)
	Device Position	Status	Normal/Tilt
Physical Characteristics	Power Supply	2 × 3500 mAh ER17505 Li-SOCI2 battery	
	Battery Life	≥10 years (10 min interval + 20 triggers per day)	
	Operatiog Temperature	-15°C to +60°C(5°F to 140°F)	
	Relative Humidity	≤90% (non-condensing)	
	Ingress Protection	IP67	
	Dimension	111 × 62 × 40 mm (4.37 × 2.44 × 1.57 in)	
	Material & Color	ABS, Black	
	Installation	On the flat surfaces with screws	
Operation	Weight	0.37lb (168g)	
	Configuration	NFC Configuration via Mobile App	