MULTITECH®

LoRaWAN®
Wireless
Ultrasonic
Level Sensors

Radio Bridge LoRaWAN® Wireless Ultrasonic Level Sensor provides high accuracy proximity detection and ranging in air. It is ideal for tank level monitoring and measurements, factory bin level detection, smart parking systems, snow level monitoring, waste management and rangefinder distance measurement.

The Ultrasonic Level Sensor can measure distances between 500mm to 10m and the sensor must be mounted such that the required distances are within that range. Distances outside of that range will result in incorrect measurements. This includes distances that are too close (less than 500mm) as well as too far (greater than 10m). The sensor must also be mounted such that it is perpendicular to a flat surface. Mounting the sensor at an angle to the surface or using a surface that is not flat may result in incorrect measurements. Flat surfaces also include the surface of a liquid. The Ultrasonic Level Sensor provides plug and play connectivity to the Maxbotix Ultrasonic sensors used in a variety of distance and level detection applications.
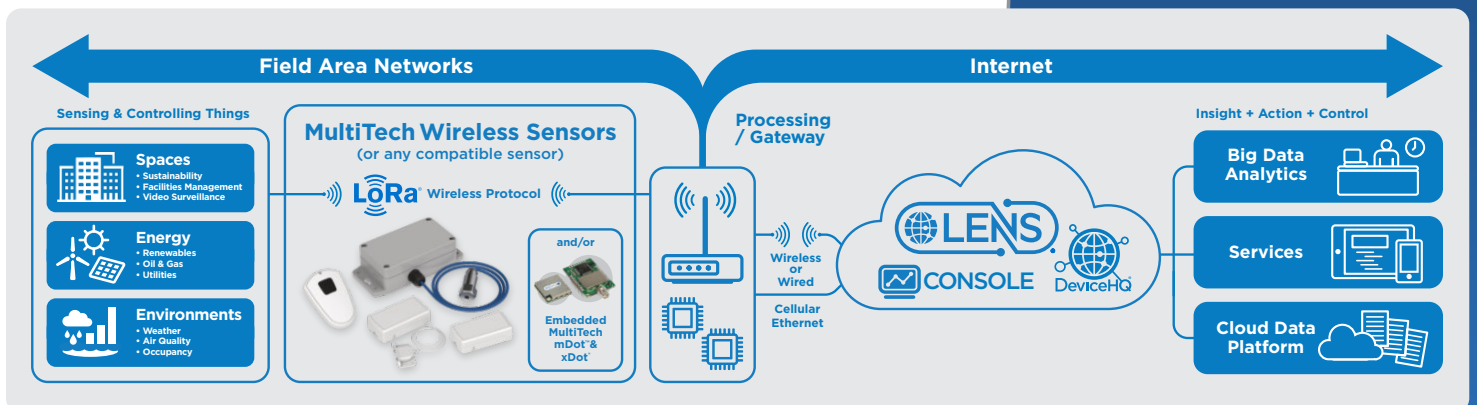
LoRaWAN wireless sensors make it easy to connect sensor data to your applications. Best in class RF performance enables sensors to work in environments where others fail. Advanced power management provides maximum battery life. LoRaWAN wireless sensors can be configured over the air, enabling them to be optimized, before and after installation, for the most optimum reporting intervals or thresholds to provide the data that is important to your application, when you need it.

BENEFITS
- Open architecture for flexible integration
- Optional web-based console for provisioning, monitoring, and configuration of sensors in the field
- Seamlessly integrate with MultiTech portfolio of LoRaWAN gateways

FEATURES
- Based on LoRaWAN wireless technology
- Very long range, up to several miles
- Excellent wireless penetration through structures such as walls and floors
- Enclosure tamper detection
- Automatic error reporting through supervisory messages
- Over the air configuration

LoRaWAN® Wireless IoT Sensors
Long-range wireless sensors for the Internet of Things (IoT)

Radio Bridge LoRaWAN® wireless sensors, utilize the LoRaWAN wireless standard and are all engineered

for long-range, low cost, and extended battery life applications. These sensors deliver critical asset

information so you understand what's going on and can react quickly when needed.

Sensor / Item	Description	Applications
RBS306-US10M-US 	**LoRaWAN Ultrasonic Level Sensor for Outdoor/Industrial Use** The LoRaWAN Ultrasonic Level sensor provides high accuracy ultrasonic proximity detection and ranging in air. The weather-proof enclosure makes the sensor suitable for outdoor and industrial use.	• Distance measurement • Bin / Tank Level Measurement • Parking Management • Presence Detection • Inventory Status • Snow Level Monitoring • Waste Management & Garbage Levels

Radio Bridge Console

The Radio Bridge Console is an optional web-based fully integrated solution that provides sensor configuration, LoRaWAN Network Server management, configurable alerts and notifications and sensor visualization that enables you to deploy and validate your sensor-to-cloud solution immediately, without spending weeks or months on system integration efforts.

LEARN MORE: radiobridge.com/software/device-management-console

SENSOR SPECIFICATIONS OVERVIEW

Item / Type	Description
Sensor Type	LoRaWAN Ultrasonic Level (Outdoor/Industrial Use)
Part Number	RBS306-US10M-US
LoRa® Wireless	
Frequency Band (MHz)	902-928
Channel Plan	US915
Protocol	LoRaWAN compliant
Antenna	Internal
Power	
Battery Powered	Yes
Battery Type	2 X CR123A
User Replaceable	Yes
Battery Life	200,000+ transmissions, up to 10 years depending on configuration (https://radiobridge.com/documents/Sensor%20Battery%20Estimator.xlsx)
Physical Description	
Physical Dimensions (LxWxH)	5.12″ x 2.56″ x 1.58″ (130.05mm x 65.02mm x 40.13mm)
Physical Weight	227g (base weight without probe: 175g)
Enclosure Type	ABS Plastic, outdoor rated
Mounting	Screw
Environmental	
Operating Temperature	-40 to +70°C
Operating Humidity	10 - 90% (non-condensing)
Storage Temperature	-40° to +45°C*
Certifications	
Compliance	FCC/IC
Warranty	2-Years / www.multitech.com/legal/warranty

*The device may be stored at higher temperatures, but degradation of the battery life will occur.
See user guide for more information.

ORDERING INFORMATION

MultiTech Sensor

Model	Description	Region
RBS306-US10M-US	LoRaWAN Ultrasonic Level Sensor with 10 meter range for Outdoor/Industrial Use (1 Pk)	North America

Services & Warranty

MultiTech's comprehensive Support Services programs offer a full array of options to suit your specific needs. These services are aimed at protecting your investment, extending the life of your solution or product, and reducing total cost of ownership. Our seasoned technical experts, with an average tenure of more than 10 years, can walk you through smooth installations, troubleshoot issues and help you with configurations.

Technical Support Services

At MultiTech, we're committed to providing you personalized attention and quality service while providing you a quick response to your product support needs. We have several options of support for you to choose from.

For additional information on Support Services as well as other service offerings, please contact your MultiTech representative or visit www.multitech.com/support.go

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