MULTITECH®

LoRaWAN®

LoRaWAN®
Wireless Leak
Detection Sensors

MultiTech LoRaWAN® Wireless Leak Detection Sensors use a sensor probe or rope to detect the presence of water. When water is detected, an alert is sent remotely over the wireless network to prevent a potentially catastrophic event.

The wireless leak detection sensors use LoRaWAN technology to warn of potential damage to expensive equipment. Place the remote leak detector near water heaters, standing tanks, windows/doors, toilets, septic systems, condenser and refrigeration systems, floor drains, or water control valves to detect costly liquid damage.
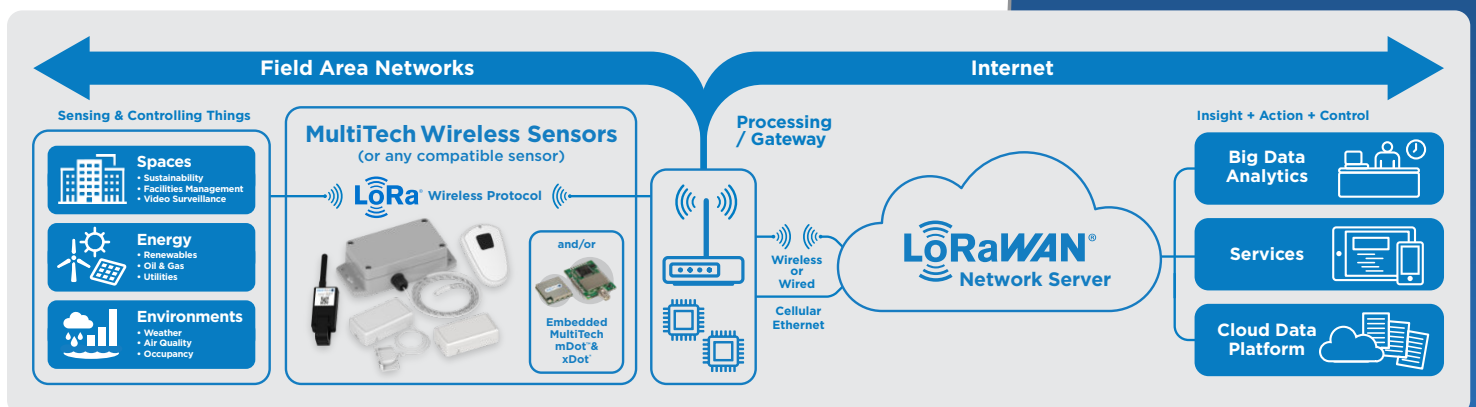
LoRaWAN wireless sensors make it easy to connect sensor data to your applications. Best in class RF performance enables sensors to work in environments where others fail. Advanced power management provides maximum battery life. LoRaWAN wireless sensors can be configured over the air, enabling them to 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 with any LoRaWAN network
• Also available is an optional web-based service for provisioning, monitoring, and configuration of sensors in the field
• Seamlessly integrate with any LoRaWAN gateway in addition to the MultiTech portfolio of LoRaWAN gateways

FEATURES
• Based on LoRaWAN wireless technology
• Optimized Radio performance by balancing performance with long battery life and excellent network performance
• Very long range, up to several miles
• Excellent wireless penetration through structures such as walls and floors
• Automatic error reporting through supervisory messages
• Over the air configuration
• Seamless integration into any cloud service. BACnet integration through MultiTech Gateways.

Field Area Networks — **Internet**

Sensing & Controlling Things

Spaces
• Sustainability
• Facilities Management
• Video Surveillance

Energy
• Renewables
• Oil & Gas
• Utilities

Environments
• Weather
• Air Quality
• Occupancy

MultiTech Wireless Sensors
(or any compatible sensor)

LoRa® Wireless Protocol

and/or

Embedded MultiTech mDot™ & xDot™

Processing / Gateway

Wireless or Wired

Cellular Ethernet

LoRaWAN® Network Server

Insight + Action + Control

Big Data Analytics

Services

Cloud Data Platform

multitech.com/sensors

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

MultiTech 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 happening and can react quickly when needed.

Sensor / Item	Description	Applications
	LoRaWAN Water Detect Sensor for Indoor Use This sensor uses a probe to detect the presence of water. When the presence of water is detected, an alert is sent to the wireless network.	• Leak Detection • Sink and Toilet Leak Detection • Plumbing Leaks • Reservoir Leak Detection • Burst Pipe Monitoring • Data Center Leak Monitoring • Water Intrusion Monitoring
	LoRaWAN Water Detect with Rope Sensor for Indoor Use This sensor uses a water rope to detect the presence of water. When the presence of water is detected, an alert is sent to the wireless network. Designed for indoor use. Models available with 1, 5 or 10 meter water rope.	
	LoRaWAN Water Detect with 1 Meter Rope Sensor for Outdoor/Industrial Use This sensor uses a water rope to detect the presence of water. When the presence of water is detected, an alert is sent to the wireless network. Designed for industrial/outdoor use.	

MultiTech Device Management Console

The MultiTech Console is an optional web-based fully integrated solution that provides sensor configuration, LoRaWAN Network Server management, configurable alerts and notifications. Sensor visualization 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				
LoRa° Region	United States/ Canada	European Union/ United Kingdom	United States/ Canada	European Union/ United Kingdom	United States/ Canada
Sensor Type	LoRaWAN Water Detect with Probe (Indoor Use)	LoRaWAN Water Detect with Probe (Indoor Use)	LoRaWAN Water Detect with 1, 5 or 10 Meter Water Rope (Indoor Use)	LoRaWAN Water Detect with 1, 5 or 10 Meter Water Rope (Indoor Use)	LoRaWAN Water Detect with 1 Meter Water Rope (Outdoor/ Industrial Use)
Part Number	RBS3010NA0ABN00	RBS3010EU0ABN00	RBS3010NA0ABN08 (1 Meter) RBS3010NA0ABN0B (5 Meter) RBS3010NA0ABN09 (10 Meter)	RBS3010EU0ABN08 (1 Meter) RBS3010EU0ABN0B (5 Meter) RBS3010EU0ABN09 (10 Meter)	RBS306-WR1M-US
LoRa Wireless					
Frequency Band (MHz)	902-928	863-870	902-928	863-870	902-928
Channel Plan	US915	EU868	US915	EU868	US915
Protocol	LoRaWAN compliant				
Antenna Peak (typical) Antenna Gain	0.3dBi	0.3dBi	0.3dBi	0.3dBi	1.3dBi
Power					
Battery Powered	Yes				
Battery Type / Qty	CR123A x 1				CR123A x2
User Replaceable	Yes				
Battery Life	Optimized solution: up to 10 years battery life. (https://radiobridge.com/documents/Sensor%20Battery%20Estimator.xlsx)				
Physical Description					
Physical Dimensions (LxWxH)	2.81" x 1.46" x 0.75" (71.37mm x 37.08mm x 19.05mm)				5.12" x 2.56" x 1.58" (130.05mm x 65.02mm x 40.13mm)
Physical Weight	68g		94g (1 Meter Model) 276g (5 Meter Model) 512g (10 Meter Model)	94g (1 Meter Model) 276g (5 Meter Model) 512g (10 Meter Model)	227g (base weight without probe: 175g)
Enclosure Type	ABS Plastic, IP30, indoor rated				ABS Plastic, IP54, outdoor rated
Mounting	Double Sided Tape or Screw (w/Tamper)				Screw
Range	Water Present / Water not Present				
Resolution	Programmable threshold setting				
Accuracy	The wet and dry conductivity thresholds are configurable				N/A
Environmental					
Operating Temperature	-40 to +50°C				-40 to +70°C
Operating Humidity	10 - 90% (non-condensing)				
Storage Temperature	-40° to +45°C (higher temps may degrade battery)				
Certifications					
Compliance	FCC/IC, REACH, ROHS	CE, RED, UKCA, REACH, ROHS	FCC/IC, REACH, ROHS	CE, RED, UKCA, REACH, ROHS	FCC/IC, REACH, ROHS
Warranty	2-Years / www.multitech.com/legal/warranty				

See user guide for more information.

SENSOR SPECIFICATIONS OVERVIEW

Item / Type	Description	
LoRa Region	Australia/New Zealand	Australia/New Zealand
Sensor Type	LoRaWAN Water Detect with Probe (Indoor Use)	LoRaWAN Water Detect with 1, 5 or 10 Meter Water Rope (Indoor Use)
Part Number	RBS3010AU0ABN00	RBS3010AU0ABN08 (1 Meter) RBS3010AU0ABN0B (5 Meter) RBS3010AU0ABN09 (10 Meter)
LoRa Wireless		
Frequency Band (MHz)	915-928	
Channel Plan	AU915/AS923	
Protocol	LoRaWAN compliant	
Antenna Peak (typical) Antenna Gain	0.8dBi	
Power		
Battery Powered	Yes	
Battery Type / Qty	CR123A x 1	
User Replaceable	Yes	
Battery Life	Optimized solution: up to 10 years battery life. (https://radiobridge.com/documents/Sensor%20Battery%20Estimator.xlsx)	
Physical Description		
Physical Dimensions (LxWxH)	2.81" x 1.46" x 0.75" (71.37mm x 37.08mm x 19.05mm)	
Physical Weight	68g	94g (1 Meter Model) 276g (5 Meter Model) 512g (10 Meter Model)
Enclosure Type	ABS Plastic, IP30, indoor rated	
Mounting	Double Sided Tape or Screw (w/Tamper)	
Range	Water Present / Water not Present	
Resolution	Programmable threshold setting	
Accuracy	The wet and dry conductivity thresholds are configurable	
Environmental		
Operating Temperature	-40 to +50°C	
Operating Humidity	10 - 90% (non-condensing)	
Storage Temperature	-40° to +45°C (higher temps may degrade battery)	
Certifications		
Compliance	AS/NZS CISPR 22; RCM; AS/NZS 4268:2012 + a1:2013, MPE Standard 2014; AS/NZS 62368.1:2018 / IEC 62368-1:2014	
Warranty	2-Years / www.multitech.com/legal/warranty	

See user guide for more information.

ORDERING INFORMATION

MultiTech Sensors

Model	Description	Region
RBS3010NA0ABN00	LoRaWAN Water Detect Sensor with Probe for Indoor Use (1 Pk)	United States/ Canada
RBS3010EU0ABN00	LoRaWAN Water Detect Sensor with Probe for Indoor Use (1 Pk)	European Union/ United Kingdom
RBS3010AU0ABN00	LoRaWAN Water Detect Sensor with Probe for Indoor Use (1 Pk)	Australia/ New Zealand
RBS3010NA0ABN08	LoRaWAN Water Detect Sensor with 1 Meter Water Rope for Indoor Use (1 Pk)	United States/ Canada
RBS3010NA0ABN0B	LoRaWAN Water Detect Sensor with 5 Meter Water Rope for Indoor Use (1 Pk)	United States/ Canada
RBS3010NA0ABN09	LoRaWAN Water Detect Sensor with 10 Meter Water Rope for Indoor Use (1 Pk)	United States/ Canada
RBS3010EU0ABN08	LoRaWAN Water Detect Sensor with 1 Meter Water Rope for Indoor Use (1 Pk)	European Union/ United Kingdom
RBS3010EU0ABN0B	LoRaWAN Water Detect Sensor with 5 Meter Water Rope for Indoor Use (1 Pk)	European Union/ United Kingdom
RBS3010EU0ABN09	LoRaWAN Water Detect Sensor with 10 Meter Water Rope for Indoor Use (1 Pk)	European Union/ United Kingdom
RBS3010AU0ABN08	LoRaWAN Water Detect Sensor with 1 Meter Water Rope for Indoor Use (1 Pk)	Australia/ New Zealand
RBS3010AU0ABN0B	LoRaWAN Water Detect Sensor with 5 Meter Water Rope for Indoor Use (1 Pk)	Australia/ New Zealand
RBS3010AU0ABN09	LoRaWAN Water Detect Sensor with 10 Meter Water Rope for Indoor Use (1 Pk)	Australia/ New Zealand
RBS306-WR1M-US	LoRaWAN Water Detect Sensor with 1 Meter Water Rope for Outdoor/Industrial Use (1 Pk)	United States/ Canada

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

World Headquarters

Multi-Tech Systems, Inc.
2205 Woodale Drive
Mounds View, MN 55112 USA
Tel: 763-785-3500
Email: sales@multitech.com
www.multitech.com

Features and specifications are subject to change without notice.

MULTITECH

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[MultiTech](#):

[RBS3010NA0ABN08](#) [RBS3010EU0ABN08](#) [RBS3010EU0ABN09](#) [RBS3010NA0ABN00](#) [RBS3010NA0ABN0B](#)
[RBS3010EU0ABN0B](#) [RBS3010NA0ABN09](#)