MULTITECH®

LoRaWAN®
Wireless Push
Button Sensor

MultiTech LoRaWAN® Wireless Push Button Sensor transmits an alert, signal or message on a button push event. It can be used as a panic button wearable device, personal emergency response system (PERS), remote control, or other remote push button applications. An alert is sent to the wireless network when the button is pushed.

Push button sensors are another example of how the Internet of Things (IoT) is helping people in real-time get the support they need. Wireless Push Button sensors connect to your emergency network to keep your team, clients, patients or classrooms safe.
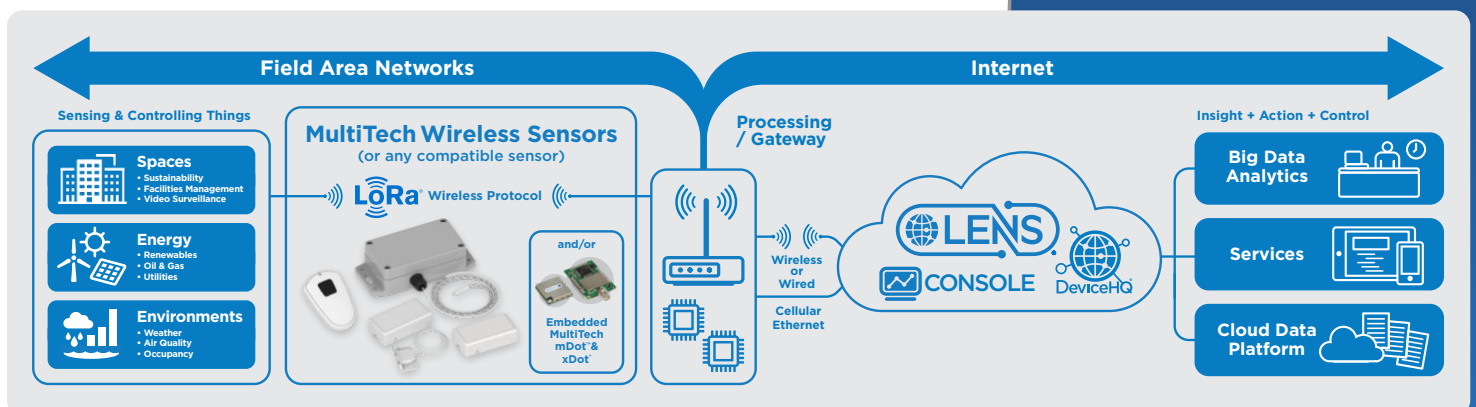
LoRaWAN wireless sensors make it easy to connect sensor data to your applications. Best in class RF performance enables sensors to work in environments where others fail. Advanced power management provides maximum battery life. LoRaWAN wireless sensors can be configured over the air, enabling them to 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

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

LENS CONSOLE DeviceHQ

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 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
	LoRaWAN Push Button Sensor for Indoor Use The LoRaWAN Single Push Button sensor can be used as a panic button or for other remote push button applications.	• Panic Button • Building Security • Service Call • Personal Emergency Response (PERS)

Default Downlink Settings

See "Downlink Messages" section in the user guide:
**https://multitech.com/wp-content/uploads/
S000826_Radio-Bridge-LoRaWAN-Wireless-Sensors_User-Guide.pdf**

General: 0x0100201200000000
Uplink retries: 8
Message confirmation: Enabled
ADR: Enabled
Supervisory period: 18 Hours

Advanced: 0xFC00011800000000
Rate limit: Disabled
Port number: 1
Link quality check period: 24 Hours

Sensor: 0x0600020000000000
Hold: Enabled
Released: Enabled
Pressed: Enabled
Hold delay: ½ second
LED blink on confirmed: Enabled
LED blink on send: Enabled
LED on when pressed: Enabled

Backlog setting: 0xEB01000000000000
Clear backlog on reboot: Enabled

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	
Sensor Type	LoRaWAN, Single Push Button (Indoor Use)
Part Number	RBS304-1-US
LoRa® Wireless	
LoRa® Region	Canada/United States
Frequency Band (MHz)	902-928
Channel Plan	US915
Protocol	LoRaWAN compliant
Antenna	Internal
Power	
Battery Powered	Yes
Battery Type / Qty	CR123A x 1
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	
Sensor Type	Push Button Panic Switch
Physical Dimensions (LxWxH)	3.05" x 2.04" x 0.75" (77.47mm x 51.816mm x 19.05mm)
Physical Weight	45g (with no accessories); 50g with pocket clip; 55g with all accessories
Enclosure Type	ABS Plastic, IP30, indoor rated
Mounting	Belt Clip, Lanyard or Wall Mount
Range	N/A
Resolution	N/A
Accuracy	N/A
Environmental	
Operating Temperature	-40 to +70°C
Operating Humidity	10 - 90% (non-condensing)
Storage Temperature	-40° to +45°C (higher temps may degrade battery)
Sensor Attributes	
Publish Type	Over-the-air configurable. Periodic, Threshold or Publish on change
Periodic Interval	Over-the-air configurable from 1 minute to 127 hours
Certifications	
Compliance	FCC/IC, REACH, ROHS
Warranty	2-Years / www.multitech.com/legal/warranty

See user guide for more information.

ORDERING INFORMATION

MultiTech Sensor

Model	Description	Region
RBS304-1-US	LoRaWAN Alert, Single Push Button Sensor for Indoor Use (1 Pk)	Canada/United States

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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