

About LoRaWAN® Wireless Industrial Sensors

MultiTech LoRaWAN® Wireless Industrial Sensors can be used for a variety of applications across numerous industries. The Wireless Voltage and 4-20mA Current Loop sensors are typically used in applications where there is a need to monitor and measure voltage or current, such as the health of a battery, detecting a power failure, and machinery monitoring health. These industrial sensors are designed for outdoor/industrial use.

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. 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 and BACnet integration through MultiTech Gateways



Ordering Options

Ordering Part Number	Description	Region
RS306-VM30-US	LoRaWAN VM30 Voltage Sensor for Outdoor/Industrial Use (1 Pk)	Canada United States
RBS306-420MA-US	LoRaWAN 4-20mA Current Loop Sensor/Bridge for Outdoor/Industrial Use (1 Pk)	Canada United States

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	Description	Application
LoRaWAN Voltage Sensor for Outdoor/Industrial Use	The LoRaWAN Voltage Sensor measures a voltage between 0-30V with a precision of 10mV. Available alerts include upper and lower threshold crossing, incremental change, and periodic interval.	<ul style="list-style-type: none"> ■ Battery health ■ Power failure detection ■ Load & fault detection ■ Glass break detection ■ Security applications ■ Motor failure detection
LoRaWAN 4-20mA Current Loop Sensor for Outdoor/Industrial Use	The LoRaWAN 4-20mA Current Loop Sensor measures amperage of a 4-20mA current loop with a precision of 10uA. Available alerts include upper and lower threshold crossing, incremental change, and periodic interval. The 4-20mA sensor can also be used as a bridge device to enable a wide variety of sensors with only a 4-20mA output.	<ul style="list-style-type: none"> ■ Monitor industrial process control outputs ■ Monitor signaling to control values ■ Enable existing 4-20mA sensors ■ General monitoring of 4-20mA industrial output

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

Visit: <https://www.radiobridge.com/software/device-management-console>

Specifications

Category	Description	
Operational Characteristics		
LoRaWAN Region	Canada/United States	
Sensor Type	LoRaWAN 4-20mA Current Loop (Outdoor/Industrial Use)	LoRaWAN 0-30V Voltage Sensor
Part Number	RBS306-420MA-US	RBS306-VM30-US
LoRa® Wireless		
Frequency Band (MHz)	902-928	
Channel Plan	US915	
Protocol	LoRaWAN compliant	
Antenna Peak (typical) Antenna Gain	0.3 dBi	0.3 dBi
Power		
Battery Powered	No	Yes
Battery Type / Qty	5-24V (Customer Supplied Power)	2x CR123 Battery
User Replaceable	Yes	
Physical Characteristics		
Sensor Type	MilliAmp Measurement	Voltmeter Probe
Physical Dimensions (L×W×H)	5.12 x 2.56 x 1.58 (130.05mm x 65.02mm x 40.13mm)	5.12 x 2.56 x 1.58 (130.05mm x 65.02mm x 40.13mm)
Physical Weight	162g	240g
Enclosure Type	ABS Plastic, IP54, outdoor rated	ABS Plastic, IP54, outdoor rated
Mounting	Screw (includes Tamper) Includes Wiring Harness	Screw (includes Tamper)
Range	4-20mA	0 to 3000mV
Resolution	10uA	10mV
Accuracy	10uA	0.6V Half Scale
Environmental		
Operating Temperature	-40°C to +70°C	-40°C to +70°C
Operating Humidity	10% to 90% (non-condensing)	
Storage Temperature	-40°C to +45°C (higher temperatures may degrade battery)	
Certifications		
Compliance	FCC/IC, REACH, ROHS	FCC/IC, REACH, ROHS
Warranty		
Warranty	2-Years / www.multitech.com/legal/warranty	

See user guide for more information.

Contact Information

General Information	info@multitech.com https://multitech.com/contact-us/
Sales	+1 (763) 785-3500 sales@multitech.com
Technical Support Portal	+1 (763) 717-5863 https://support.multitech.com
Website	www.multitech.com

World Headquarters	Multi-Tech Systems, Inc. 2205 Woodale Drive Mounds View, MN 55112 USA
--------------------	--------------------------------------------------------------------------------