

Precision in Every Degree: Enabling Smart Cold Chain Solutions with LoRaWAN™ Temperature Sensors

Our Sentrius™ RS26x is a battery powered IP67 temperature sensor platform that delivers HACCP level temperature monitoring with real time alerting for your food safety compliance. In addition to ensuring product safety, these intelligent devices avoid inventory loss, improve facility efficiency, and save you time and money in automated day to day operations.

The improved RS26x is the outcome of real-world use and feedback from our market leading RS1xx sensor family implemented in 1,000s of restaurants, convenience stores and supermarkets globally. It builds on that QSR domain expertise, weaving in Ezurio's decades of experience in designing wireless IoT devices. This layers in deep expertise in radio & antenna design with optimizations to affect the longest wireless range, whilst always ensuring robust, reliable data integrity in the harshest of RF environments.

The RS26x is a small form factor device utilizing LoRaWAN for long range data transmission and Bluetooth LE for OTA configuration and troubleshooting. The device has been designed to send highly accurate temperature readings tested to the EN12830:2018 standard for temperature recorders.

Ezurio offers full customization of the final product, including software, configurations, enclosures and labelling, to enable you to create a truly unique branded device for your end customers.



Sensor Type: Temperature

Key Features



Max Range, Minimal Power Consumption

The RS26x uses LoRaWAN and a unique antenna design to reliably send data in the harshest RF environments while saving critical battery life.



Small Form Factor

Less than 1/2 the size of our previous RS1xx series at a compact 94 x 52 x 28 mm.



Durable, Food Contact Safe IP67 Enclosure

Rugged, reliable IP67-rated enclosure is waterproof, dustproof, and food contact safe.



No Loss Data Transmission

Automatic transmission of stored backlog data in case of any network outage



Configurable OTA via Bluetooth LE

Configurable via smartphone or tablet over local Bluetooth connection with our mobile apps.



Highly Accurate and Responsive Readings

EN12830:2018 tested via our innovative and reactive sensor enclosure design

Application Areas



Cold Chain Monitoring and Food Safety



Smart Buildings



Temp Controlled Environment Monitoring

Specifications

Category	Feature	Specification
Chipset	LoRa	Semtech SX1261 or SX1262
	Bluetooth	Silicon Labs EFR32BG24
Supported Regions	RS261	UK, EU
	RS262	USA, Canada, Australia, New Zealand
LoRaWAN Specification	Class	LoRaWAN : Class A
	RF Transmit Power	RS261 – Upto 14 dBm
		RS262 – Upto 22 dBm
Internal Temperature Sensor	Temperature Sensor	Sensirion STS40
	Accuracy	Typical $\pm 0.2^{\circ}\text{C}$
	Resolution	0.01°C
	Response time	2 s
	Long term drift	Typ $< 0.03^{\circ}\text{C/y}$
External Temperature Probe	Probe Temperature Range	-40°C to $+125^{\circ}\text{C}$ (-40°F to 257°F)
	Accuracy	$\pm 1^{\circ}\text{C}$ ($\pm 1.8^{\circ}\text{F}$) for -30°C to $+105^{\circ}\text{C}$; $\pm 2^{\circ}\text{C}$ ($\pm 3.6^{\circ}\text{F}$) for -40°C to -30°C and $+105^{\circ}\text{C}$ to $+125^{\circ}\text{C}$
	Temperature Probe Length	40 mm (+/- 0.5 mm)
	Temperature Probe Diameter	$\varnothing 5$ mm (+/- 0.2mm)
	Temperature Probe Cable Length	2 meters (+/- 20 mm) – including USB C connector
	Temperature Probe Material	SUS 304 stainless steel
	Probe interface	USB C
	Sensor performance	Tested to EN12830:2018
General Specifications	Dimensions	93.9 x 51.9 x 28.5 mm
	Mounting	Zip tie
	Battery - replaceable	1 x CR123A
	Button	Multi-use (Instant read, Bluetooth LE Pairing)
	Device configuration	Android & iOS devices via Canvas Xbit App
	Operating temperature range	$-40 \sim +85^{\circ}\text{C}$
	Environment rating	IP67 rated, Food Contact safe
	Battery Life (SF10 – 15-minute transmission)	2 years
	Regulatory approvals	FCC, IC, CE, UKCA, ASNZS ,Bluetooth SIG and LoRa Alliance certified
	Warranty	1 Year warranty

Ordering Information

Part	Description
450-00104-K1	Sentrius™ RS262 – LoRaWAN / BLE Internal Temperature Sensor. North America (Single)
450-00040-K1	Sentrius™ RS261– LoRaWAN / BLE Internal Temperature Sensor. Europe / UK (Single)
450-00129-K1	Sentrius™ RS262 – LoRaWAN / BLE Internal Temperature Sensor. Australia (Single)
450-00105-K1	Sentrius™ RS262 – LoRaWAN / BLE Internal Temperature Sensor. New Zealand (Single)
450-00133-K1	Sentrius™ RS262 – LoRaWAN / BLE Sensor inc External Thermistor Probe. North America (Single)
450-00041-K1	Sentrius™ RS261 – LoRaWAN / BLE Sensor inc External Thermistor Probe. Europe / UK (Single)
450-00161-K1	Sentrius™ RS262 – LoRaWAN / BLE Sensor inc External Thermistor Probe. Australia (Single)
450-00153-K1	Sentrius™ RS262 – LoRaWAN / BLE Sensor inc External Thermistor Probe. New Zealand (Single)