

# Respiratory Sensor

## LoRaWAN® Device for Respiratory Illness Detection and Management

The **TEKTELIC Respiratory Sensor** is the ideal solution to monitor patients and vulnerable individuals for potential respiratory illness. This specialized device is designed to continuously monitor and detect the most common symptoms of respiratory illness including increased body temperature and breathing rate, persistent cough and accelerated heart rate. An adjustable, washable strap ensures the device can be worn comfortably and discreetly in any situation.

The Respiratory Sensor utilizes the long range and low power capabilities of LoRaWAN® to provide reliable “Always On” connectivity and unprecedented battery life of over 3 months. It is fully integrated with the TEKTELIC Respiratory Sensor Desktop Application for timely and accurate monitoring and notification of urgent events requiring medical intervention.

### Sensing Functions

- » Body Temperature
- » Respiration (Breathing) Rate
- » Chest Expansion
- » Cough/Sneeze Detection
- » Body Position
- » Heart Rate
- » Panic Push Button

### Key Features

- » Fully Integrated Desktop Application
- » Adjustable, Washable Strap
- » Low Battery Indicator (LED)
- » Self-Calibration for Chest Expansion



### Technical and Functional System Specifications

#### General System Parameters

Operational Temperature	0°C to 50°C
Intended Operational Temperature*	32°C to 42°C
Body Temperature Accuracy	0.05°C from 35°to 40°C
Ingress Protection	IP30
Device Size	67.7 x 36.2 x 11.7 mm
Strap Size	For Chest Sizes 80cm to 140cm
Battery	CR2450
Estimated Battery Life	3 months

\*Device will enter a Low-Power Sleep Mode outside this range

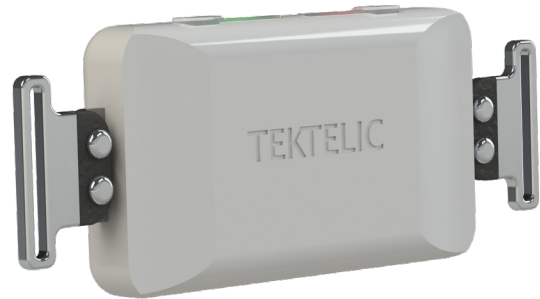
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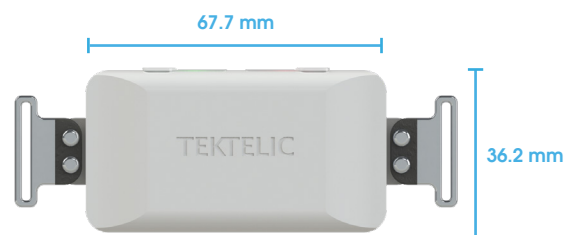
#### LoRa Parameters

RF Power	8 dBm
RF Sensitivity	up to -137dBm
ISM Band	All Global Bands
Antenna	Internal
LoRa Device Class	Class A



#### Regulatory Compliance

Safety	IEC 60950-1 (CE)
Regulatory	ETSI EN 300 220
	ETSI EN 301-489-1/-3
	FCC 15.247    FCC 15.209



TEKTELIC Communications is a premier supplier of best-in-class LoRaWAN® IoT Gateways, Sensors, and custom applications. These elements combined provide a powerful end-to-end solution that can be easily, quickly, and cost effectively deployed to address the most demanding IoT challenges.

For more information please visit [www.tektelic.com](http://www.tektelic.com)