

Indoor Sensor

The Truety Indoor Sensor is a compact sensor that monitors the temperature, humidity and CO_2 levels in indoor spaces. Real-time data is displayed on an E-ink screen to provide users with information about their environment and comfort.

The Indoor Sensor is commonly used in offices, stores, classrooms, hospitals and other indoor spaces. The displayed data can be transmitted using LoRaWAN® technology with minimal power. The two provided batteries are rated for a three year lifespan and are fully replaceable. When combined with Truety's LoRaWAN® gateways users can remotely manage and visualize all sensor data via the Truety Portal.



Specifications

Display & Configuration	Indoor Sensor
Display	2.13-inch Black & White E-Ink
Button	1 × Power Button
LED	1 × Traffic Light Status Indicator
Configuration	Mobile App via NFC

Wireless Transmission	Indoor Sensor
Technology	LoRaWAN®
Frequency	US915
Tx Power	22 dBm
Sensitivity	-137dBm @300bps
Mode	OTAA/ABP Class A

Physical Characteristics	Indoor Sensor
Power Supply	2 × 2700 mAh ER14505 Li-SOCl ₂ Replaceable Batteries
Battery Life	3 Years
Operating Temperature	-4°F to +140°F (E-Ink Screen: 32°F - +104°F)
Relative Humidity	0% to 95% (non-condensing)
Ingress Protection	IP30
Dimension	2.68 × 2.56 × 0.81 in
Installation	Wall Mounting







Sensors

Temperature	Indoor Sensor
Operating Principle	Digital CMOSens® technology (MEMS)
Range	-4°F - +140°F
Accuracy	± 0.2°K
Resolution	0.1°K

Humidity	Indoor Sensor
Operating Principle	Digital CMOSens® technology (MEMS)
Range	0% - 100% RH
Accuracy	± 2% RH
Resolution	0.5% RH

Carbon Dioxide (CO²)	Indoor Sensor
Operating Principle	Digital CMOSens® technology (MEMS)
Range	0% - 100% RH
Accuracy	± (30 ppm + 3 % of reading) (32°F to +122°F)
Resolution	1 ppm

Key Hardware Features

- » Equipped with various sensors including those for monitoring humidity, temperature, and CO₂ levels
- » Easily understand comfort levels through visual data and clear emoticons displayed on an E-ink screen
- » Scheduled Smart Hibernate Mode to save battery power
- » Equipped with traffic light indicator to indicate multi-level CO₂ threshold alarms
- » 3-year replacable batteries
- » This system is capable of storing 560 historical records locally and can support retransmission to prevent any potential loss of data
- » This device comes with NFC built-in to simplify the configuration process
- » Compliant with standard LoRaWAN® gateways and network servers



