

Senstick Temperature Buffer STB10

Senstick STB10 is an award-winning LoRaWAN temperature-buffer sensor designed for autonomous deployment up to 7 years in harsh environments. It simultaneously monitors ambient and buffer-temperatures (via a glass-bead filled thermal buffer) to better reflect real-world conditions, and includes onboard data logging.



Key features

- Harsh environments
- Rigidized housing
- Easy installation
- Motion detection
- NFC configuration

Applications

- Cold Rooms
- HACCP digitalization
- Warehouses
- Storages
- Retail

Technical specification



Enclosure

Weight	90g w/ batteries / 140 g with batteries
Dimensions	150mm x 25mm
Materials	UV stable plastic
IP rating	IP67

Operating conditions

Temperature	-40°C to +85°C
Humidity	0 to 100% RH

Power supply

Battery type	1 x 1.5V AA Alkaline
Expected operation	<7 years (depending on sampling, signal, environment)

Configuration

Sending interval	Configuration via NFC and downlink
Data upload interval	Configuration via NFC and downlink
NFC configuration	Native Android App

Datasheet

Release: 24.10.2025

Version: 1.0

senzemo

Connectivity

Wireless Technology	LoRaWAN® 1.0.3
Wireless Security	LoRaWAN® End-to-End encryption (AES-CTR), Data Integrity Protection (AES-CMAC)
LoRaWAN Device Type	Class A - End-device
Supported regions	US902–928, EU863–870, AS920-923, AU915–928 (All bands available)
Link Budget	137dB (SF7) to 151dB (SF12)
RF Transmit Power	14dBm (Region specific)

Data Logging

Temperature	Device logs 40 days of data (at 60 min send period), 14 days (at 20 min send period), 10 days (at 15 min send period), or 7 days (at 10 min send period).
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Glass Beads

Laboratory grade - EU made 1,25 - 1,56 mm



Sensors

SENSIRION

Temperature Ambient

Range	-40°C to +85°C
Accuracy	±0.2°C

Temperature Buffer

Range	-40°C to +85°C
Accuracy (with buffer delay)	±0.2°C

Acceleration

Range	±2g to ±16g
Accuracy	±40mg