

TEKTELIC BREEZE

A LoRaWAN® connected Indoor Air Quality (IAQ) Sensor

The **TEKTELIC BREEZE Indoor Air Quality sensor** provides continuous, real-time monitoring of key indoor environmental parameters, including air quality, temperature, humidity, and ambient light. Designed with a compact and unobtrusive form factor, BREEZE supports data-driven optimization of occupant comfort, health, and energy efficiency. Leveraging LoRaWAN® connectivity, it delivers reliable long-range communication with minimal power consumption, enabling scalable deployment across commercial, educational, and public indoor environments.



Sensing Functions



CO2
CONCENTRATION



AMBIENT
TEMPERATURE



AMBIENT RELATIVE
HUMIDITY



AMBIENT LIGHT



BAROMETRIC AIR
PRESSURE

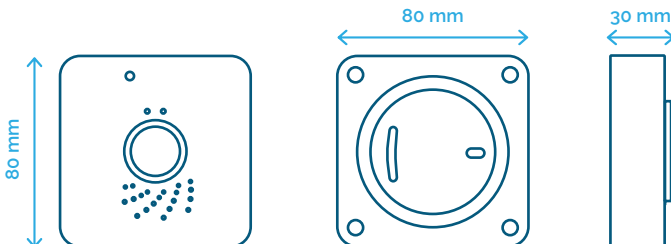


BATTERY LEVEL
INDICATOR

Features

- ✓ **10+ Years battery life*** enabled by an optimized low-power design for extended maintenance-free operation
- ✓ **Quick and easy device onboarding & data viewing** using TEKTELIC LeapX™ mobile application
- ✓ **Automatic sensor calibration** to maintain long-term accuracy and reduce maintenance
- ✓ **Simple onboarding and real-time data visualization** through the BREEZE application
- ✓ **Barometric pressure compensation** for improved measurement accuracy across varying indoor conditions
- ✓ **TEKTELIC Kona Atlas™ support** for payload encoding and decoding
- ✓ **Dynamic reporting schedules** optimized for maximum battery life and application flexibility
- ✓ **TEKTELIC Locus™ integration** for centralized device, data, and fleet management
- ✓ **Compatible with standard LoRaWAN® gateways and network servers** for broad interoperability
- ✓ **Sleek, unobtrusive industrial design** suited for modern indoor environments
- ✓ **Optional E-Ink display enabled via Bluetooth** connectivity providing convenient at-a-glance IAQ monitoring
- ✓ **Rapid deployment** for scalable commercial and enterprise installations

* Actual battery life varies based on configuration, data rate, and operating temperature.



Technical and Functional System Specifications

General System Parameters

Operational Temperature	0°C to 60°C
Storage Temperature	-40°C to 60°C
Operational Relative Humidity	5% - 95% Non-Condensing
Ingress Protection	IP30
Size	80 x 80 x 30 mm (with mounting clip)
	80 x 80 x 26 mm (without mounting clip)
Weight (including batteries)	128 g
Battery	2 x AA LTC

Battery Life

Reporting Period - 15 min @SF7	11 Years
Reporting Period - 15 min @SF10	7 Years

Wireless Parameters

	LoRa	BLE
RF Power (Max)	15 dBm	0 dBm
RF Sensitivity	-137 dBm (SF12, 125 kHz)	-96 dBm (1 Mbps)
Channel Plans	EU868, US915, AU915, AS923-1,-2,-3,-4, IN865, KR920	2.4GHz ISM
Antenna	Internal	Internal
LoRa Device Class	Class A	N/A
Specification Version	1.0.4	5.2

Sensor Specifications

	Range	Accuracy	Resolution
CO2 (using NDIR Sensor)	400-5000ppm	+/- 30 ppm +3% of reading	1 ppm
Ambient Temperature	0-60°C	+/- 0.3°C	0.1°C
	5-60°C	+/- 0.2°C	
Ambient Relative Humidity	0-100%	+/- 4%	0.5%
	20-80%	+/- 2%	
Ambient Light	5-1000 lux	N/A	N/A
Barometer	300-1200 hPa	+/- 2 hPa	0.1 hPa
	700-1100 hPa	+/- 1.5 hPa	

Certifications & Compliance

Regulatory	FCC, ISED, CE (RED)
Product Safety	IEC 62368-1
Environmental	RoHS
LoRaWAN Certified	LoRaWAN 1.0.4 for EU 868

TEKTELIC Communications is a premier supplier of complete LoRaWAN® IoT solutions. Our end-to-end systems combine network infrastructure, devices, and applications to enable easy, fast, and cost-effective deployment for the most demanding IoT challenges.