DATASHEET // EYE SENSOR



EYE Sensor

BLE ID Beacon with Sensors

With 5 total functionalities—Beacon ID, temperature, humidity, movement & magnet detection—the Morey EYE Sensor is designed to be a tracking swiss army knife. The robust waterproof casing and extended-lifetime battery ensure you'll keep an eye on your assets no matter the environment, while fast & easy configuration and integration save you precious time and resources. Perfect for both traceability and cold chain refrigerator use cases: delivery tracking, logistics (trailers, containers), agriculture (tractor attachments), construction (tools, inventory) and more.

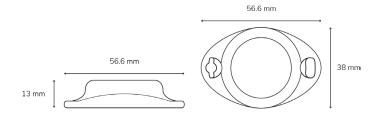


Highlights

- BLUETOOTH 4.2 COMPLIANT, BLUETOOTH 5.2 CERTIFIED
- UP TO 5+ YEARS BATTERY LIFE
- IP67 CASING WITH DUAL MOUNTING POINTS
- INTUITIVE MOBILE APP FOR CONFIGURATION, DATA SCANNING AND OTA UPDATES
- 4 SENSOR SET (TEMPERATURE, HUMIDITY, MOVEMENT, MAGNET DETECTION)
- SUPPORTS IBEACON AND EDDYSTONE PROTOCOLS



Dimensions & Mounting



SENSOR

Functionalities	Beacon ID, LED, Temperature, Humidity, Accelerometer, Magnet detection
Humidity Accuracy	±1.8 (typ.), ±3.5 (max.) @30-70% RH ±2 (typ.), ±4 (max.) @0-30% RH and @70-100%
Temperature Accuracy	±0.2 (typ.), ±0.4 (max.) @0-60°C (32°F-140°F)
	±0.4 (typ.), ±0.7 (max) @-20-0°C (-4°F-0°F)

BATTERY & POWER

Model	CR2450
Туре	Lithium, Manganese Dioxide (Li/MnO2)
Total Capacity	600 mAh
Replaceable	No
Battery Life (Tx=2 dBm; interval: 3 s)	2.5+ years
Battery Life (Tx=2 dBm; interval: 10 s)	5+ years

ELECTRONIC

Microcontroller	ST Microelectronics BlueNRG-2
Quartz Crystals	32.768 kHz, 16 MHz
Bluetooth Operating Frequency	2.402 - 2.480 GHz
Bluetooth Antenna Gain (Peak)	1.58dBi



CONNECTIVITY

Bluetooth	Bluetooth 4.2 compliant, Bluetooth 5.2 certified
Range	80 m
Available Transmission Power Levels	Up to 8 dBm
Sensitivity	-88 dBm

PHYSICAL

Dimensions	56.6 mm x 38 mm x 13 mm
Weight	18 g

CASING

Protection	IP67
Mounting	Two mounting holes
Customization	Custom logo upon request*

*Special conditions

ENVIRONMENTAL

Humidity (Non-condensing)	From 0% to 100%
Operational Temperature*	-20°C/+60°C (-4°F/+140°F)
Temperature Measuring Range*	-20°C / +60°C (-4°F / +140°F)

*Possible to have -40 $^\circ\text{C}$ / +85 $^\circ\text{C}$ (-40 $^\circ\text{F}$ / +185 $^\circ\text{F}$)

COMPLIANCE & COMPATIBILITY

Certifications	FCC
Protocols	iBeacon, Eddystone, Teltonika