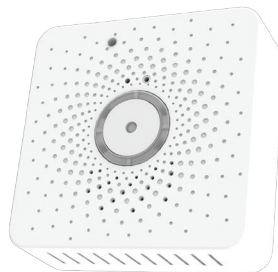


TEKTELIC AERIS

LoRaWAN® Sensor with continuous monitoring of particulate matter

The **TEKTELIC AERIS** Indoor Air Quality sensor provides continuous, real-time monitoring of key indoor environmental parameters, including particulate matter (PM1, PM2.5 and PM10), temperature, humidity, and ambient light. Designed with a compact and unobtrusive form factor, AERIS enables data-driven optimization of indoor air quality, supporting healthier environments and improved occupant comfort. Leveraging LoRaWAN® connectivity, it delivers reliable long-range communication with minimal power consumption, allowing for scalable deployment across commercial, educational, and public indoor spaces.



Sensing Functions



PM1, PM2.5, PM10



AMBIENT
TEMPERATURE



AMBIENT RELATIVE
HUMIDITY



AMBIENT LIGHT



BAROMETRIC AIR
PRESSURE

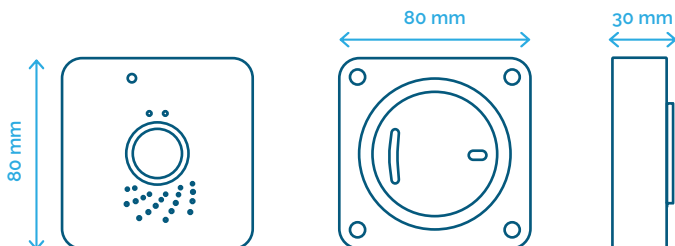


BATTERY LEVEL
INDICATOR

Features

- ✓ **7+ Years battery life*** enabled by an optimized low-power design for extended maintenance-free operation
- ✓ **Continuous PM1, PM2.5 and PM10 monitoring** enables early detection of harmful air pollution for proactive air quality management.
- ✓ **Dynamic reporting schedules** optimized for maximum battery life and application flexibility
- ✓ **Compatible with standard LoRaWAN® gateways and network servers** for broad interoperability
- ✓ **Optional E-Ink display** enabled via Bluetooth connectivity providing convenient at-a-glance IAQ monitoring
- ✓ **Quick and easy device onboarding & data viewing** using TEKTELIC LeapX™ mobile application
- ✓ **TEKTELIC Kona Atlas™ support** for payload encoding and decoding
- ✓ **TEKTELIC Locus™ integration** for centralized device, data, and fleet management
- ✓ **Sleek, unobtrusive industrial design** suited for modern indoor environments
- ✓ **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)	91 g		
Battery	2 x AA LTC		
Battery Life			
Reporting Period - 60 min @SF7	7.6 years		
Reporting Period - 60 min @SF10	6.5 years		
Reporting Period - 30 min @SF7	4.2 years		
Reporting Period - 30 min @SF10	3.6 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
PM 2.5	0-1000 µg/m3	+/- 10 µg/m3	1 µg/m3
Ambient Temperature	0-60°C	+/- 0.3°C	0.1°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	+/- 1 hPa	0.1 hPa
Certifications & Compliance			
Regulatory	FCC, ISED, CE (RED)		
Product Safety	IEC 62368-1		
Environmental	RoHS		

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.

