Modular Lorawan IOT Sensor Manufacturer

Product Sheet

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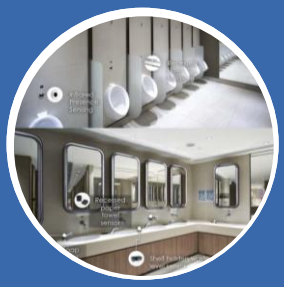
2026

AEM-106



IoT Platform





Massive Facilities





LoRaWAN® Sensors

LoRaWAN®

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LoRaWAN®

LoRaWAN 3-in-1 Temp / Humidity / NH3 Sensor

Temp / Humidity / NH3

Outdoor Odour & Emission Monitoring

SKU: AEM-106



The Atomsenses AEM-106 is a LoRaWAN electrochemical NH3 sensor with high sensitivity to low concentrations, high selectivity and a stable baseline, supplied in an outdoor shelter for ambient odour and emission monitoring.

It features an ultra-low power design and smart firmware and works with any LoRaWAN gateway.

LoRaWAN Communication

Any standard LoRaWAN gateway; OTAA / ABP Class A

Outdoor Shelter & Mounting

Louvred radiation shield on pole or wall bracket

Electrochemical NH3 Sensing

High selectivity for low-concentration NH3

Supports ODM & OEM

- Technology: LoRaWAN®; OTAA / ABP, Class A
- Frequency: EU868/US915/AU915/KR920/AS923-1&2&3&4
- Tx Power: 16 dBm (868 MHz) / 22 dBm (915 MHz) / 19 dBm (470 MHz)
- Sensitivity: -137 dBm @ 300 bps
- Temperature: Range -20~70°C; Resolution 0.1°C; Accuracy ±0.5°C
- Humidity: Range 0~100%RH; Resolution 0.1%RH; Accuracy ±2%RH
- Power Supply: 2 × 4000 mAh ER18505 Li-SOCl2; 3 years
- NH3: Range 0~100PPM; Resolution 0.01ppm; Accuracy <±0.1ppm
- Enclosure: IP30 sensor; IP65 with shelter
- Dimension: 125 × 125 × 29.5 mm; Pole or wall mount

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Specification

LoRaWAN®

Wireless Transmission		
Technology		LoRaWAN®
Frequency		EU868/US915/AU915/KR920/AS923-1&2&3&4
Tx Power		16 dBm (868 MHz) / 22 dBm (915 MHz) / 19 dBm (470 MHz)
Sensitivity		-137 dBm @ 300 bps
Mode		OTAA / ABP Class A
Sensors Specification		
Temperature	Range	-20°C to +70°C
	Accuracy	±0.5°C
	Resolution	0.1°C
Humidity	Range	0% to 100% RH
	Accuracy	±2% RH
	Resolution	0.1% RH
Ammonia (NH3)	Range	0 to 100 ppm
	Accuracy	< ±0.1 ppm
	Resolution	0.01 ppm
Physical Characteristics		
Power Supply		2 × 4000 mAh ER18505 Li-SOCl2 replaceable batteries
Battery Life		Up to 3 years
Operating Temperature		-20°C to +60°C
Relative Humidity		0% to 95% (non-condensing)
Ingress Protection		IP30 (sensor) / IP65 (with outdoor shelter)
Dimension		125 × 125 × 29.5 mm
Installation		Pole Ø25–50 mm or wall bracket
Outdoor Enclosure & Protection		
Enclosure Type		Louvred radiation shield, stackable plates
Housing Material		UV-stabilised ASA, white; stainless fixings
Shelter Protection		Screens sensing element from direct sun, rain and wind
Mounting		Ø25–50 mm pole or wall bracket; 2 × M12 cable glands



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About Q-Vision Technology Limited

- Established in 2019, with its headquarters located in Hong Kong and backed by HK based consortium
- R&D Centers in Shenzhen, Guangdong and Changsha, Hunan
- Atomsenses is a trademark owned by Q-Vision for the company's IoT sensor products including Air Quality LoRaWAN Sensors
- Our vision is to create healthier indoor spaces and future cities that enhance well-being and productivity