

Atmocube

ProMED USA
products that REALLY work.

WELL and RESET Certified IAQ Monitor for Residential and Commercial Buildings



V3-0326

ProMedUSA Pte Ltd • 111 North Bridge Road • #08-27 Peninsula Plaza • Singapore 179098

Tel: 6836 9665 • Email: sales@promedusa.us • www.promedusa.us



SCAN for Video

PRODUCT SUBMITTAL

Atmocube



Better IAQ starts with better sensors

Good air quality, along with the right levels of light intensity and noise, have a massively positive impact on productivity and wellbeing of frequent space attendants. Atmocube continuously monitors the indoor air quality and notifies you about sudden changes so you can take care of your visitors non-stop. Create environments where people thrive.

- Covers space up to 3500 sq ft
- Integration with BMS and HVAC
- Best-in-class sensors with proven accuracy and reliability

Certifications

RESET

Atmocube is a RESET Grade B accredited air quality monitor. [More information can be found here.](#)

MCERTS

The Sensirion SPS30 PM2.5 sensor utilized in Atmocube passed the MCERTS certification (MCERTS Performance Standards for Indicative Ambient Particulate Monitors).

More information and examples of the certificate can be found at: [MCerts Certified Products](#)

[MCERTS report is available here.](#)

Other Lab Reports

[Sondar Lab report on PM2.5 and PM10.](#)

[LMEG Lab report on CO2 and TVOC sensors.](#)

Specifications

Air Quality Measurements		
Parameter	Range	Measurement Intervals
CO2	0 to 5000ppm	1 Minute
PM1.0, PM2.5, PM4.0, PM10 (ug/m3)	0 - 1000 ug/m3	1 Minute
TVOC Index (Total Volatile Organic Compounds Index) Green Building Standard Compliance	Output Signal Range: 1 to 500 VOC Index Points	1 Minute
NOx Index (Total for nitric oxide (NO) and nitrogen dioxide (NO2))	Output Signal Range: 0 to 10 Nox Index Points	1 Minute
Formaldehyde (CH2O)	0 - 1ppm	1 Minute
Temperature (C)	-40 to 125C	1 Minute
Relative Humidity (RH%)	0 - 100% RH	1 Minute
Background Noise Level	30 - 100 dB	1 Minute
Light Intesity	0 - 60000 lux	1 Minute

Comply with green building standards

Meet the healthy building requirements on continuous indoor air quality monitoring with user-friendly and engaging devices.

Detect high concentrations of pollutants and identify harmful building materials right from the project onset with accurate Atmocube sensors.



Atmocube Technical Specifications

SKU: BF2-E

Protocols	Interfaces	Power
MQTT Modbus RTU Modbus TCP	Wi-Fi (802.11 b/g/n @ 2.4GHz) Bluetooth 4.1 USB-A RS-485 Ethernet	USB-C, 50/60Hz, 5V @ 2A PoE (Power over Ethernet) Direct wiring, 24V AC/DC

PRODUCT SUBMITTAL

Atmocube



Sensor Accuracy and Technical Specifications

Parameter	Sensor Model	Range	Accuracy	Measurement Interval
CO2 (Carbon Dioxide)	Sensirion SCD41	0 to 5000 ppm	± 75 ppm @ 400-1000 ppm ± 40 ppm + 5% of the measured value @ 1'001 ppm – 2'000 ppm	1 minute
(Particulate Matter)	Sensirion SPS30 Sensor Specification Statement	0 to 1000 µg/m3	±10 µg/m3 at 0 to 100 µg/m3	1 minute
PM1			±10 % of the measured value at 100 to 1000 µg/m3	
PM2.5			PM2.5 accuracy verified by MCERTS at 0-75 µg/m3 ≤ 5 µg/m3	
PM4			±25 µg/m3 at 0 to 100 µg/m3	
PM10			±25 % of the measured value at 100 to 1000 µg/m3	
TVOC Index (Total Volatile Organic Compounds Index) Green Building Standard Compliance	Sensirion SGP41	Output Signal Range: 1 to 500 VOC Index Points	Device-to-Device Variation: ≤±15 VOC Index points or % m.v. (the larger)	1 minute
TVOC (ppm)*		Output Signal Range: 0 to 3 ppm*	15% of the measured value	
NOx Index (Total for nitric oxide (NO) and nitrogen dioxide (NO2))		Output Signal Range: 0 to 10 NOx Index Points	Device-to-Device Variation: ≤±15 NOx Index points or % m.v. (the larger)	
CH2O (HCHO, Formaldehyde)	Sensirion SFA30	0 to 1 ppm	±0.02 ppm or ±20% of the measured value, whichever is larger.	1 minute
Temperature	Sensirion STS35-DIS	-40 to +125C	± 0.1 C	1 minute
Relative Humidity	Sensirion SHTC3	0 to 100 %RH	± 2 %RH	1 minute
Atmospheric Pressure	Infinion DPS310	300 to 1200 hPa	± 1 hPa	1 minute
Light Intensity	AMS TCS34725	0 - 60000 lux	±10%	1 minute
Background Noise Level	Knowles SPH0641LM4H-1	30 - 100 dB	±2dB	1 minute

*Using Sensirion conversion algorithm

PRODUCT SUBMITTAL

Atmocube



Atmocube – Continuous Air Quality Monitor

INTERFACES:

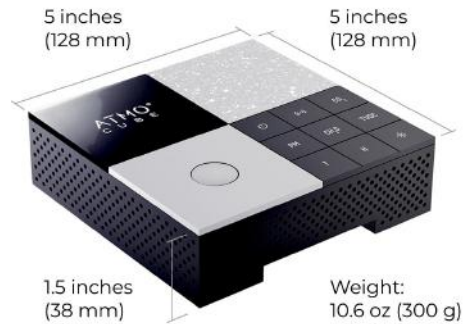
- Wi-Fi (802.11 b/g/n @ 2.4GHz)
- Bluetooth 4.1
- Ethernet
- USB-A
- RS-485

PROTOCOLS:

- MQTT
- Modbus RTU
- Modbus TCP
- BACnet (via a gateway)

POWER:

- USB-C, 50/60Hz, 5V @ 2A
- Direct wiring, 24V AC/DC
- PoE



Available for your BMS via Modbus, MQTT, BACnet, or with our Cloud Dashboard and mobile apps.

Certified Building Grade Sensors

Tested accuracy (RESET Grade B) to fulfill the requirements of the leading sustainable building standards: LEED, WELL, RESET Air.



SENSORS:

- CO₂
- PM_{2.5}
- TVOC
- CH₂O
- Temperature
- Rel. Humidity

Measurement interval: 1 min

Continuous Indoor Air Monitoring

LEED BD+C: NEW CONSTRUCTION v5

Parameter	Point
CO ₂ (Carbon Dioxide)	1
PM _{2.5} (Particulate Matter)	
TVOC (ppm)	
Temperature	
Relative humidity	
Total possible points: 1 point	

LEED O+M: EXISTING BUILDINGS v5

Parameter	Benchmark	Points
CO ₂ (Carbon Dioxide)	>1000 ppm	2
	800 ppm	4
PM _{2.5} (Particulate Matter)	>15 µg/m ³	2
	12 µg/m ³	4
TVOC (ppm)	Any level	2
Total possible points: 2 – 10 points		

WELL v2: Air, Thermal Comfort, Materials

WELL Requirement	Atmocube
A01 Air Quality, Part 1, Part 2	Compliant
A08 Air Quality Monitoring and Awareness	2 points
T06 Thermal Comfort Monitoring	1 point
T07 Part 1 — Long-term humidity data	1 point
X01 Restrict Lead	Compliant
X05.1 Select Compliant Interior Furnishings	1 point
Total: up to 5 points. Supports sensor module replacement to comply with WELL v2 annual recertification	

Atmocube E-Ink Display



Model	Atmo E-ink 2nd Gen
Screen Size	4.2 inch (diagonal)
Dimensions (W x H x D)	99 x 94 x 14 mm (3.9 x 3.7 x 0.55")
Displayed information	Up to 6 parameters + overall AQI index + branding + QR + status
Resolution	400 x 300 px
Display Type	EPD (Electronic Paper Display) Black/White/Red
Display area	85 x 64 mm
Orientation	Landscape or Portrait
Viewing angle	Near 180°
Appearance	White color
Operational temperature	0°C to 50°C +32°F to 122°F
Power Supply	4 CR2450 Replacable batteries
Work time	up to 1 year before battery replacement at 15 minute refresh