



airthinxPRO

technical characteristics

how does it work?

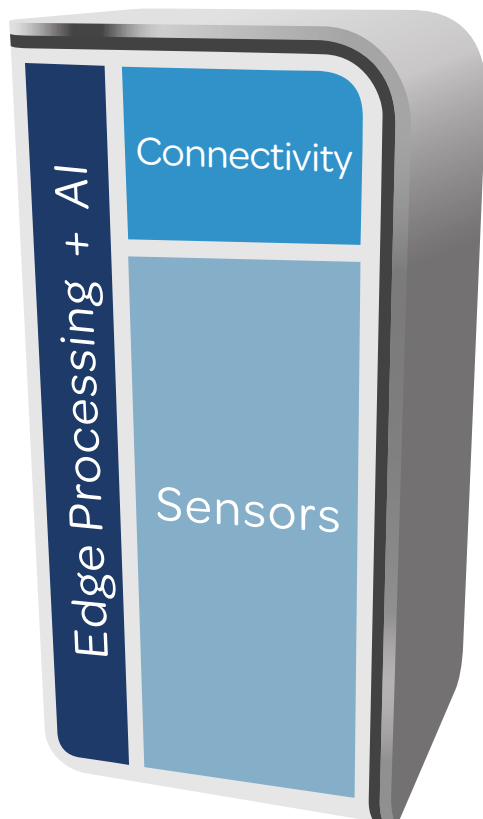
a complete solution for smart cities

1 Air travels into the airthinxPRO where more than 9 sensors evaluate its quality.



3 Data can be accessed online through the web console or mobile airthinx app, anytime, anywhere.

2 Built-in connectivity enables wirelessly sending data to the cloud.



A powerful processor combined with artificial intelligence (AI) provide accurate, and reliable data acquisition, analytics and communication to the cloud.

5G/4G/3G

GPRS

NB-IoT

Bluetooth

Mesh

WiFi

Temperature

Humidity

Barometer

Sound Pressure

PM1

PM2.5

PM10

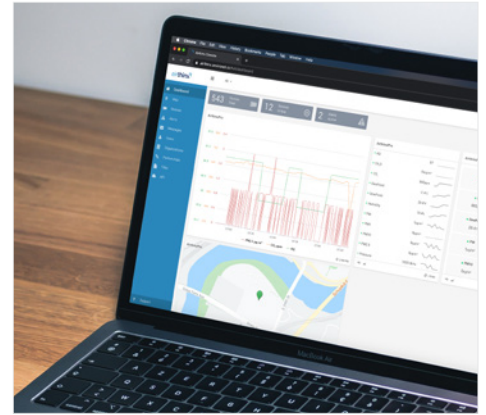
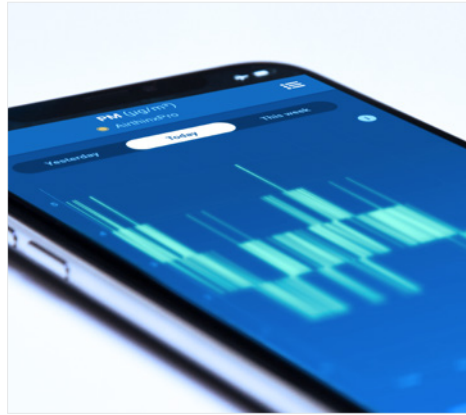
Dew Point

Gas Sensors

+ up to 6 gas sensing modules

SO_x, NO_x, VOCs, O₃, CH₂O, CO₂, CO, NH₃, CH₄, and more...

Product Specifications



Gas Sensors

SO ₂	Effective Range	0 - 100 ppm
	Maximum Consistency Error	< ±15
NO ₂	Effective Range	0 - 20 ppm
	Maximum Consistency Error	-20 to -40
NO	Effective Range	0 - 20 ppm
	Maximum Consistency Error	0 to -20
CH ₂ O	Effective Range	0~1 mg/m ³
	Maximum Error	<5% FS
CO ₂	Effective Range	0 to 100 % vol (Process Control)
	Maximum Consistency Error	±10ppm
CO	Effective Range	0 - 1000 ppm
	Maximum Consistency Error	< 10
O	Effective Range	80 to 120
	Maximum Consistency Error	< 1
O ₃	Effective Range	0 - 20 ppm
	Maximum Consistency Error	< -20 to -40
NH ₃	Effective Range	0 - 100 ppm
	Maximum Consistency Error	< 3
H ₂ S	Effective Range	0 - 100 ppm
	Maximum Consistency Error	< 20
tVOCs (PID)	Effective Range	0 - 200 ppm
	Maximum Consistency Error	> 0.6

PM Sensors

PM 1, PM 2.5, PM 10	0.3~1.0; 1.0~2.5; 2.5~10 µm
Effective Range	0~500 µg/m ³
Resolution	1 µg/m ³
Efficiency	98%>=0.5µm
Maximum Consistency Error	±10% @100~500 µg/m ³
Standard Volume	0.1L

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Product Specifications

Environmental Sensors

Temperature	Range	-20 - 70 °C
	Resolution	0.1 °C
	Maximum Error	±0.5 °C
Humidity	Range	0-99 %RH
	Resolution	0.1 %RH
	Maximum Error	±2 %RH
Barometer	Range	300-1100 hPa
	Resolution	±0.12 Pa
	Maximum Error	±1.3 Pa

Communications

Cellular	GSM/GPRS/EDGE 850, 900, 1800, 1900 MHz, UMTS/HSPA 800/850, 900, AWS 1700, 1900, 2100 MHz
WiFi	802.11 b/g
Bluetooth	Bluetooth 4.0
Mesh	Zigbee, LoRa
GPS	Sensitivity > -165dBm, 3m Accuracy, A-GPS
Antenna	Built-in (GPRS, 3G, GPS, Zigbee, Bluetooth, LoRa)
SIM Card	Built-in

General

Input Voltage	5 - 12 VDC
Power	0.6 Watt
Operating Temperature	-30 °C to 75 °C (-22 F to 167 F)
Accelerometer	16g (13-bit resolution)
Dimensions (LxWxD)	4.5in (11.43cm) x 9.625in (24.45cm) x 4.5in (11.43cm)
Weight	1.6 Lbs (0.73 kg)
Certifications	CE, FCC, PTCRB