

aethair PRO

Technical Specifications



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General

Input Voltage	5 - 24 VDC, 110-240 VAC
Power	0.6 Watt Built-In Battery & Charger
Alerts	Visual and Audio
Operating Temperature	-30 °C to 75 °C (-22 F to 167 F)
Accelerometer	16g (13-bit resolution)
Dimensions (LxWxD)	4.5in x 9.625in x 4.5in
Weight	1.6 Lbs (0.73 kg)
Certifications	CE, FCC

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

*Additional sensors can be included based on the application

PM Sensors

Size Range	0.3 to 25 µm
Size Channels	0.3, 0.5, 1.0, 2.5, 5.0, 10.0 µm
Flow Rate / Accuracy	0.1 CFM (2.83 LPM) / +/- 3%
Aerosol Concentration Range	0.1 to 20,000 µg/m ³
Internal Vacuum Pump	Internal with automatic flow control

Environmental Sensors

Temperature	Range	-20 - 70 °C
	Resolution	0.1 °C
	Maximum Error	±0.5 °C
Humidity	Range	0 - 90% RH
	Resolution	0.1 %RH
	Maximum Error	±2 %RH
Barometer <small>Optional differential pressure sensors</small>	Range	300-1100 hPa
	Resolution	±0.12 Pa
	Maximum Error	±1.3 Pa
Ambient Light Sensor	Effective Range	0 to 300 Lux
Noise Level Sensor	Effective Range	-87 to 80 dBA

Communications

Cellular	4G LTE / 3G / 2G
WiFi	802.11 b/g
Bluetooth	Bluetooth 4.0
Mesh	Zigbee
GPS	A-GPS
Antenna	Built-in
SIM Card	Built-in