



1Air: Smart and built to master any sampling.



1Air is an innovative platform designed for the new generation of environmental sampling devices. Engineered to be ultra-lightweight, battery-operable, and seamlessly integrated with the Dado Lab Companion APP, it offers full control through an intuitive interface and efficient data management.

The user interface is simple and intuitive, supporting four configurable modes that can be tailored to a variety of monitoring needs.

Among them are Low Volume Samplers, which comply with EN12341:2023 and are suitable for collecting TSP, PM10, PM2.5, and PM1 using either EN-LVS or EPA inlets.

Whether used for everyday assessments or rapid deployment in critical situations, 1Air delivers high-performance air sampling in a compact, connected, and versatile format.

1Air Gas and 1Air Seq

1Air Gas is 8-way sequential manifold sampler, engineered for high-efficiency gas sampling.

Fully compliant to EN 14622:2005, it is a perfect solution for benzene samplings, with low-flow optimized pumps and programmable volume-based sampling, it delivers accuracy with ease.

The dual-valve system guarantees airtight sealing of the sampled vials and allows for independent valve programming.

It is also compatible with various vial sizes.



1Air Seq is the 8-channel sequential manifold sampler, specifically designed for high-efficiency ramp sampling in asbestos monitoring applications.

Equipped with optimized pumps capable of handling significant pressure drops caused by preloaded cassettes over 24-hour sampling periods, especially under high humidity conditions, it ensures reliable performance. The system also features programmable, volume-based sampling for precise and user-friendly operation.

Its single-path valve control system allows for independent valve programming and is compatible with both preloaded cassettes and 47 mm open-face filter holders.

1Air HV: high flow battery rapid deployment in critical situations

1Air HV is the high-volume sampler designed for both routine environmental monitoring and emergency response scenarios, where portability and autonomy are essential.

Whether for daily assessments or rapid deployment in critical situations, 1Air delivers high-performance air sampling in a compact, connected, and versatile format.

The sampling module operates at a flow rate between 180 and 220 L/min. Its housing is made of anodized aluminum and includes an integrated filter support. The glass cartridge containing the PUF is positioned beneath the filter, and the entire module is mounted directly on the sampling tube at the top of the instrument. For safe transport to the laboratory, sealing caps and a protective container are provided

When the analysis of PM10 or PM2.5 fractions is required, dedicated sampling heads are available. These are specifically designed to operate at a flow rate of 200 L/min, ensuring accurate and compliant particulate matter monitoring.

A dedicated battery ensures at least 24 hours of continuous operation, and the system comes equipped with a trolley-style Pelican case for easy transport and field readiness.



Dado Lab Companion App: smart control at your fingertips.

Available for free on Google Play, the Dado Lab Companion App is your ultimate tool for unlocking a new level of efficiency in environmental monitoring.

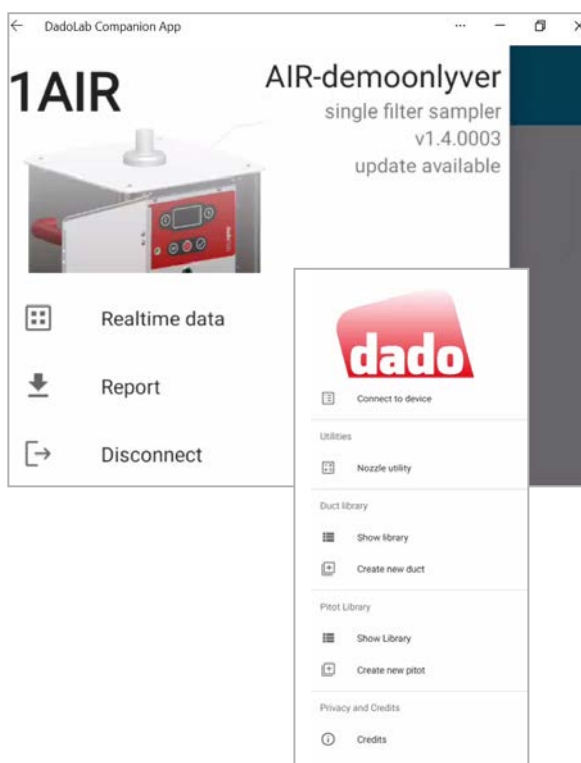
With this app, you can manage every aspect of your sampling workflow, from programming libraries to retrieving data from previously connected instruments. Generate and view reports directly on your smartphone, download them, and instantly share them with your lab or office via email.

But that's not all. The app is your real-time companion in the field, sending instant notifications about sampling status and allowing you to check what the instrument is doing nearby, without even touching the device.

This smart connectivity doesn't just simplify your operations: it accelerates setup, streamlines reporting, and dramatically reduces the risk of data loss, even in the most demanding field conditions.

And with continuous updates and new features always on the horizon, the Dado Lab Companion App keeps evolving, so you're always one step ahead.

Once you try it, traditional systems will feel instantly outdated.



Part number and accessories

1Air delivered with USB stick, test report and manual, power cable with Schuko plug and 47mm filterholder

102 103 10211Air - Single Filter Sampler for EN-LVS head

Accessories

102 101 2015EN-LVS Sampling head (without nozzles)

102 101 2017Set of nozzle for PM10 @2.3 m3/h

102 101 2019Set of nozzle for PM2.5 @2.3 m3/h

102 101 2010TSP-LVS samplig head

102 101 400047mm Filterholder for EN-LVS PMx Head

102 101 4005Pack of 2 POM cartridges for EN-LVS head filterholder

102 103 2011PUF cartridge for EN-LVS Head

102 103 400147mm cassette for 1PMx

102 103 4011Complete 47mm filterholder for 1PMx

1Air Gas 1Air Seq : delivered with USB stick, test report and manual, power cable with Schuko plug

102 103 10321Air Gas- Outdoor sampling station with 8 ways manifold

102 103 10331Air Seq- Outdoor PM sampling station with 8 ways manifold

1Air HV: delivered with USB stick, test report and manual, power cable with Schuko plug

102 105 10211Air HV - Single Filter Sampler High Volume sampler

1Air HV accessories

102 105 2031102mm filter module including PUF cartridge

102 105 2035Glass PUF Cartridge

102 105 2036Plugs Glass PUF Cartridge

102 105 2001PM10 sampling head for 1PM HV

102 105 2011PM2.5 sampling head for 1PM HV

102 105 2013PM1 sampling head for 1PM HV

102 105 2041F/F Adapter for 1PM VX

Common accessories

102 105 2050LiFePO4 150Ah 24V battery for 1PMx HV-BT/1Air

102 105 2051LiFePO4 100Ah 24V battery for 1PMx HV-BT/1Air

102 103 20011PMx support stand

Technical characteristics

Constructive	Operation conditions	-20 ÷ 50°C
	Stock conditions	-20 ÷ 50°C, 95% UR
	Display	OLED high-brightness display, 2.5 inches
	Data port	Using the Dadolab Companion App
		Calibration and data download via Windows PC
	Internal memory	16GB
	Power supply	Multi-voltage: 110 Vac ÷ 230 Vac ±10% 50/60Hz
		Optional battery operation available
	Materials	Steel/Aluminum combined structure
	Keyboard	Polycarbonate, tactile effect keys
	Dimensions	47x32x32 cm
	Weight Support Stand	5Kg
	Battery	LiFePO4 100Ah 24V housed in a Pelican-style case with trolley
	Weight	30 Kg
	Battery	LiFePO4 150Ah 24V housed in a Pelican-style case with trolley
	Weight	40 Kg
Ambient Pressure & Pressure Drop	Range	10 ÷ 105 kPa (1050 mBar)
	Hysteresis and linearity	0.25 % F.S
	Resolution	0.01 kPa (0.1 mBar)
	Accuracy	Better than ±1% (±0.25kPa)
Ambient Temperature	Type	Digital
	Range	-10 ÷ 60°C
	Resolution	0.1°C
	Accuracy	1% ± 0.4 °C
1Air LVS	Weight	15.5 Kg
	Power consumption	100W
	Pump type:	Rotative
	Nominal pump flowrate	5 m3/h
	Control type	Orifice mass flow meter
	Range	5 ÷ 50 l/min
	Resolution	0.01 l/min
	Accuracy	2%
	Battery sampling time	More than 24 hours @2.3 m3/h with 100Ah battery
1Air Gas	Weight	15Kg
	Power consumption	50W
	Pump type:	Single-head diaphragm pump
	Nominal pump flowrate	11 l/min
	Control type	Orifice mass flow meter
	Range	0,05 ÷ 5 l/min
	Resolution	0.01 l/min
	Accuracy	2%
	Battery sampling time	More than 7 days with 100Ah battery
1Air Seq	Weight	24 Kg
	Power consumption	100W
	Pump type:	Single-head diaphragm pump
	Nominal pump flowrate	32 l/min
	Control type	Orifice mass flow meter
	Range	3 ÷ 30 l/min
	Resolution	0.01 l/min
	Accuracy	2%
1Air Hv	Weight	12Kg
	Power consumption	100W
	Pump type:	Brushless blower
	Nominal pump flowrate	500 l/min
	Control type	Orifice mass flow meter
	Range	50 ÷ 500 l/min
	Resolution	0.1 l/min
	Accuracy	2%
	Battery sampling time	More than 24 hours @200 l/min with 100Ah battery

Dimensions (mm)

