

AIR FLOW Data Sampler ID & IID

- + up to 4 channel**
- + air-flow measuring**
- + temperature measuring (option)**
- + solvent residues in ppm (option)**
- + pass-through data acquisition**
- + built-in sensors**
- + computer programmable**
- + parameter selection**
- + auto scale function**
- + free selectable areas**
- + graphic charts on PC via ComPort**
- + result storing capability on PC via ComPort**
- + Data Acquisition Software**
- + auto off**



The AIR FLOW Data Samplers I D and II D are portable, pass-through, Pocket-PC based data logger for IR, convection and other heat curing systems using solvent containing inks, glues, lacquers and paints. It is measuring the air flow in the curing chamber in one or two dimensions. Optionally it is detecting organic solvent vapours, other volatile vapours and combustible gases such as carbon monoxide, ethanol, isobutanes, n-hexanes, benzenes, ethanol, acetone etc.

Due to their compact dimensions and heat resistance up to 200°C they are ideal to be used in conveyerized thermal curing ovens typically used in the printing, semiconductor and wood industry.

Pre-selection of parameters for the measuring cycle is done by connecting via ComPort to a PC. After passage of the curing chamber the recorded data can be downloaded to a computer for further editing by a Powerful Data Acquisition Software. The measurement and recording of data takes place at user-defined intervals.

The AIR FLOW Data Samplers I D and II D are equipped with either one or two air flow sensors to measure the air flow in a curing chamber either one or two directional (longitudinal or lateral). Optional solvent detection sensors measure vapours of organic solvents as well as other volatile vapours and combustible gases.

Further option is the temperature measuring made possible by a fast response temperature sensor.

The sensors are built in and the back of the unit serves as a heat shield.
Extra heat protection up to 200°C with separately available carrier (option)

The measuring results are displayed on graphs and show the airflow in m/s, and optionally the solvent concentration in ppm as well as the temperature curve during the measuring cycle in °C. The monitor displayed graphs show the complete profile and offer zooming and auto scale functions. Measuring values are also displayed as digital numbers.

The following versions are available:

AIR FLOW Data Sampler

AIR FLOW Data Samplers I D

- Item 32.2.1 AIR FLOW Data Sampler I Basic
- Item 32.2.2 AIR FLOW Data Sampler I with temperature sensor
- Item 32.2.3 AIR FLOW Data Sampler I with VOC sensor
- Item 32.2.4 AIR FLOW Data Sampler I with VOC sensor and temperature sensor



AIR FLOW Data Samplers II D

- Item 32.3.1 AIR FLOW Data Sampler II Basic
- Item 32.3.2 AIR FLOW Data Sampler II with temperature sensor
- Item 32.3.3 AIR FLOW Data Sampler II with VOC sensor
- Item 32.3.4 AIR FLOW Data Sampler II with VOC sensor and temperature sensor



Technical Data:

- Air flow measuring: 0 to 20 m/sec (one or two directional)
- Detected agents (option) : Solvents, Vapours, Gases such as:
carbon monoxide, ethanol, isobutanes, n-hexanes, benzenes, ethanol,
acetone etc.
- Measuring range (option): 0 to 5,000 ppm
- Measuring range (option): 32 to 392° F / 0 to 200° C
- Sample rate: 0.1 sec
- Power source: 8 x 1.5 V rechargeable Battery
- Power consumption: 350 mA
- Battery service life: 1,000 reloads
- Dimensions: approx. 5.8" x 7" x 0.8" (147 x 180 x21 mm)
- Weight: approx. 17.5 ounce (450 grs.)
- Temperature range: 32 to 113° F / 0 to 45° C
- Heat protection: heat protection with separately available carrier (option)
- Base Accuracy: ± 5 %

While on the conveyer belt, the AIR FLOW Data Samplers I D and II D can withstand max. 110/200° C / 230/ 392° F for up to 30 seconds. The temperature of the housing should not exceed 45° C / 113° F.

Calibration:

In order to keep the full function and precision it is recommended to have re-calibration done once per year. Re-calibration will also be necessary after change of battery.