Immission Line 2.210.01

Multifunction calibrator

FLOWCAL *Air*

USB

Main Characteristics:

- Reference calibrator to measure:
  - Flow
  - Absolute Pressure
  - Differential Pressure
  - Temperature (1)
- Flow calibrator with interchangeable measurement cells **Flowcell Air**, available in different ranges
- Possibility to use orifices calibrated from other samplers' brand (for ex. Tisch)
- High precision pressure calibrator, with thermal drift compensation device
- Creation of calibration report
- Easy and intuitive graphic interface
- Power supply with alkaline batteries and/or rechargeable AA type, replaceable by customer
- Battery autonomy up to 90 hours
- Internal memory capability: up to 256 report
- Available with ISO 17025 accredited laboratory certificate (optional)

(1) *with optional temperature probe*

Flowcal Air, more than a simple flow calibrator....

A single instrument allows to perform all necessary controls to verify the calibration of some parameters, which are normally measured by sampler, like flowrate, pressure and temperature. This characteristic makes Flowcal Air unique to test the accuracy of an instrument and to follow a quality system procedure.

Measurement traceability

This is very important to follow a quality system procedure. Flowcal Air generates a calibration report, containing the following data: cell in use, calibration expiration date, ambient conditions during verification test, deviations, test date and hour, etc.
It is no longer necessary write paper reports.

Flowcal Air has an USB port: to download the report, simply insert and copy files onto a common USB key.

Sensor and measurement calibration have been performed with high accuracy and care. Each sensor is calibrated through an accurate procedure and is traceable to standards.
Each instrument is supplied with a calibration certificate or with ISO 17025 accredited laboratory certificate (optional).

TCR TECORA s.r.l. Via Alessandro Volta, 22/24 - 20094 Corsico (Mi) Italy - Tel. 02 4505501 Fax. 02 48601811 - www.tecora.it e-mail: tcrtec@tecora.it

Product Data Immission Line 2.010.01 Ed. 1 10/10 - Technical specifications may change without previous warning

TCR TECORA

COMPANY WITH QUALITY MANAGEMENT SYSTEM CERTIFIED BY DNV
= ISO 9001:2008 =

Flowrate cells FlowCell Air

The flowrate cells, Flowcell Air, are calibrated individually: each cell saves on its microchip all the information for the calibration traceability.

How to use the measurement cell

With Flowcal Air it is very simple: just connect the cell to the instrument and switch it on. Immediatly the cell will be recognized, therefore will be available for the flow measurement.

Each cell has an ambient temperature sensor screened from the solar beam.
It is possible to connect the measurement cells to LVS and US EPA sampling heads.

FlowCell Air technical characteristics

Cell material	Anodized alluminium
Flow measurement accuracy	1 % F.S. cell
Working temperature	-20 +60 °C
Built-in temperature sensor	
Type	digital 12 bit
Accuracy	better than 1% of measure ± 0.2 °C
Range	-40 +85 °C

Code for order FlowCell Air cells

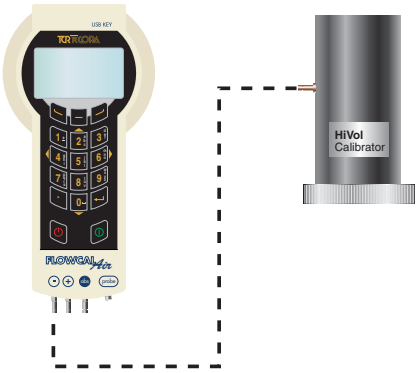
Hi Flow cell
Range 150 - 600 l/min **Code AB99-008-0010SP**

Mid Flow cell
Range 10 - 60 l/min **Code AB99-008-0011SP**

FlowCal Air HiDP for USEPA measurement orifices

It is possible to use Flowcal Air with calibrated measurement orifices, like US EPA calibrators for high flows.
Introducing in Flowcal the manufacturer's calibration constants, it is possible to transform the old orifice into an electronic range measurement. The range will be shown at standard and actual conditions. It won't be necessary using the U tubes and calculate the measurement flow each time.

Flowcal Air HiDP can't be used with FlowCell cells.

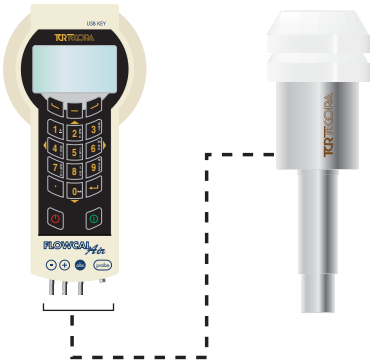


Flowcal AIr HiDP with USEPA calibrator

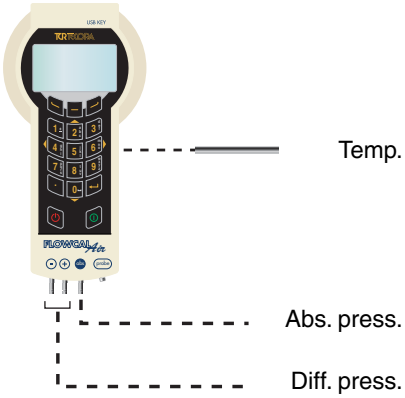
TCR TECORA s.r.l. Via Alessandro Volta, 22/24 - 20094 Corsico (Mi) Italy - Tel. 02 4505501 Fax. 02 48601811 - www.tecora.it e-mail: tcrtec@tecora.it

Product Data Immission Line 2.210.02 Ed. 1 10/10 - Technical specifications may change without previous warning

Immission Line 2.210.03



Flowcal AIr withFlowcell cell



Connection to pressure and temperature sensors

Carrying case

Technical specifications

Differential pressure

Range	0 - 2500 Pa (0 - 250 mmH_2O)
Accuracy	better than 1% of measure ± 2 Pa
Resolution	0.1 Pa (0.001 mmH_2O)
Differential pressure max	30 000 Pa (3000 mmH_2O)

(With HiDP sensor version)

Range	0 - 10000 Pa (0 - 1000 mmH_2O)
Accuracy	better than 1% F.S.
Resolution	1 Pa (0.1 mmH_2O)

Absolute pressure (static and barometric)

Range	0 - 105 kPa (1050 mBar) absolute
Accuracy	better than 1% of measure ± 0.1 kPa
Resolution	0.01 kPa (0.1 mBar)

Temperature pressure inlet

Range	-20 +80 °C
Resolution	0.01 °C
Accuracy	1% of measure ± 0.2 °C

General specifications

Working temperature	-20 +40 °C 95% UR
Power supply	n°4 alkaline batterIes type AA (or rechargeable)
Battery autonomy	up to 90 hours
Display	Graphic LCD 128x64 pixel
Keypad	Membrane with tactile effect
USB Port	USB 1.0; 1.1 e 2.0
Weight	550 g (including batteries)
Dimensions	115 x 230 x 45 mm

Code for orders

FlowCal Air supplied with: - USB key 1 Gb - Carrying case - Quick connection kit - User's manual - Calibration certificate - 4 alkaline batteries type AA	**AB99-008-0000SP**
FlowCal Air *HiDP*	**AB99-008-0001SP**
4 rechargeable batteries type AA	**AC99-004-9931SR**
Battery charger for rechargeable batteries	**AC99-004-9930SR**
Optional temperature probe inlet	**AB99-008-0006SP**
Temperature probe	**AB99-008-0020SP**

TCR TECORA s.r.l. Via Alessandro Volta, 22/24 - 20094 Corsico (Mi) Italy - Tel. 02 4505501 Fax. 02 48601811 - www.tecora.it e-mail: tcrtec@tecora.it

Product Data Immission Line 2.010.03 Ed.1 10/10 - Technical specifications may change without previous warning