



## Stack gas velocity and flow meter with Pitot Tube

# FLOWTEST ST

### MAIN CHARACTERISTICS

- . In accordance with UNI EN 13284, ISO 9096, ISO 16911, UNI 10169, EPA M2.
- . Compatible with major Pitot tubes and thermocouples in the market.
- . USB interface to download data.
- . Graphic interface highly intuitive and simple.
- . Pressure sensors highly accurate, with thermal drift compensation device.
- . Wide library with specifications of the most common ducts
- . Data logger function with saving data on USB key (supplied with the instrument).
- . Power supply with alkaline batteries and/or rechargeable AA type, replaceable by the customer.
- . Battery autonomy up to 24 hours.
- . Internal memory capability: up to 256 report.
- . Optionally available with COFRAC certificate (for laboratory accredited with ISO 17025)



### Flowtest ST establish new standards for stack gas velocity and flow meters with Pitot tubes.

Completely renewed compared to the old model, it boasts characteristics that highlight it compared to similar instruments in the market.

The classic functions of velocity performance and isokinetic sampling have been improved and made easier and more flexible.

With the new software the user can change the time duration per point, repeat a measurement point or recover an incomplete profile already stored in an easy and simple manner.

The new Flowtest ST uses an USB port: to download data, simply insert and copy files onto a common USB key.

File format is compatible with all browser and the most common spreadsheet.

Sensor calibration has 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 a COFRAC certificate (optional).





A wide selection of Pitot tubes are available for different application. For more information, see Product Data I.100.03



Optional soft case to protect the equipment



Saving and exporting data on USB key (supplied with the instrument)

### Technical characteristics

#### Differential pressure

Range	0 - 2500 Pa (0 - 250 mmH <sub>2</sub> O)
Combined hysteresis and linearity	0.25 % F.S.
Accuracy	better than 1% of measure ± 2 Pa
Resolution	0.01 Pa (0.001 mmH <sub>2</sub> O)
Differential pressure max	30 000 Pa (3000 mmH <sub>2</sub> O)

#### Absolute Pressure (static or barometric)

Range	0 - 105 kPa (1050 mBar) absolute
Combined hysteresis and linearity	0.25 % F.S.
Accuracy	better than 1% of measure ± 0.1 kPa
Resolution	0.01 kPa (0.1 mBar)

#### Temperature Measure

Resolution	0.1 °C
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#### Compatible Thermocouples:

Thermocouple type "K"	0 + 1200 °C
Accuracy	1% of measure ± 0.4 °C
Thermocouple type "J"	-20 + 600 °C
Accuracy	1% of measure ± 0.4 °C
Thermocouple type "T"	-200 + 400 °C
Accuracy	1% of measure ± 0.4 °C

#### General specifications

Working Temperature	-20 +40 °C 95% UR
Power supply	n°4 alkaline battery type AA (or rechargeable)
Battery autonomy	up to 24 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

### Codes for orders

<b>Flowtest ST</b>	AC99-004-0010SP
supplied with:	
- USB key 1 Gb	
- Carrying case	
- Quick connection kit	
- User's manual	
- Calibration certificate	
- 4 alkaline batteries type AA	

<b>Automatic autozero</b>	AC99-004-0011SP
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<b>Connecting cable for measurement probe</b>	
Length 1,3 mt	AC99-004-9920SP
Length 3 mt	AC99-004-9921SP

<b>4 rechargeable batteries type AA</b>	AC99-004-9931SR
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<b>Battery charger for rechargeable batteries</b>	AC99-004-9930SR
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<b>Soft case</b>	AC99-004-9900SN
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### UTILITY PROGRAMS AND FUNCTIONS

The most important parameters are shown on the wide graphic display.

The status bar shows the name of the site in which you are working and the battery life. The lower bar shows a menu that, through the function keys, allows a quick and intuitive navigation.



Display during measure range

The numeric keypad simplifies the data entry procedures.

Flowtest ST is supplied with a large carrying case for cables and accessories.



Carrying case

Flowtest ST includes the following utility programs:

- Programmable library with the specifications of the most common ducts exportable through USB onto PC
- Free configuration of the number of points for sub-area, based on the norm chosen by the user (EN, ISO, USEPA). After introducing the desired number of points, Flowtest St automatically executes the calculation of the sampling points. The instrument's user manual contains all the instruction to calculate the measurement grid
- Determination of the velocity profile and storage of the measurement report
- Nozzle calculation to use, based on the characteristics of the duct and the suction unit used
- Automatic autozero function: the differential pressure sensor zero can be performed with the probe into duct, without disconnecting the tubes (optional)
- Surveillance function (data logging on a fix point) with continuously logging of the measured parameters with time interval between 30 seconds and 1 hour, with storage on USB key.
- Isokinetic sampling program that includes:
  - Identification of the measurement flow to set;
  - Storage of instrument's volume and temperature readings;
  - Storage and measurement report with indication of duct parameters and sampled volumes.
- Wide preconfigured report:
  - velocity profile with point-by-point and summary report;
  - isokinetic sampling with point-by-point and summary report;
  - log of all measure point's thermodynamic parameters