



SAMPLING  
SOLUTIONS

MEGA SYSTEM

CALIBRATION  
& METROLOGY

# ISOCHECK SERIES



- Automatic processor
- Compliant with  
EN ISO 16911-1  
EN 13284-1
- Automatic isokinetic  
sampling with  
LIFETEK XP-R  
sampling series
- Battery powered



CARE FOR THE  
ENVIRONMENT



# ISOCHECK SERIES

The ISOCHECK automatic processor series use an "L" or "S" pitot tube with thermocouple, for quick and easy detection of pressure and temperature values required to determine speed and flow inside ducts. It also carries out all required processing related to automatic isokinetic sampling.

ISOCHECK is equipped with independent sensors to detect Differential Pressure, Static Pressure, Barometric Pressure (SRB version only) and temperature reading input, using K- or J-type thermocouples.

By adjusting the number of instant readings used to calculate averages at the point of measurement, it is possible to calculate precise measurements under all flow conditions.

For continuous measurement, the data-logger function memorizes the pressure and temperature parameters at pre-established intervals, ranging from 10 seconds to 5 minutes.

The data collected and processed can be stored for future consultation and can be transferred to a USB pen drive or PC via an RS232 serial port.

The computer is powered by high capacity, memory effect free, internal rechargeable batteries (NiMH), guaranteeing long-running measurements (over 9 hours).

The instrument can run on mains voltage, by taking advantage of the power supply and POWER / CHARGE function, while simultaneously maintaining an optimal charge of its internal batteries.

The connections are compatible with all types of pitot tubes and thermocouples.

A LAT certified version (as required for ACCREDIA accreditation) is available.

## TECHNICAL FEATURES

- These instruments are equipped with a polycarbonate keyboard for setting parameters and a backlit alphanumeric LCD display for data viewing; they are also equipped with a clock for DATE / TIME management.
- An RS232 port connection to LIFETEK series pump allows for automatic isokinetic sampling.
- Independent pressure sensors in compliance with Table 3 (Performance requirements), Table 4 (Performance requirements during field measurements) and Table A.1 (Performance requirements for differential pressure-based flow measurement) of UNI EN ISO 16911-1.
- The static pressure sensor is independent of the barometric pressure sensor, allowing calculation of absolute pressure as indicated in formula A.12 of the regulation (A.3.3 Absolute pressure of gas). The unit can also obtain instantaneous acquisitions at the measuring point, thus improving the quality of the results.
- Optional micro valves allow for automatic zeroing of the pressure sensors while the measuring tube is inside the chimney, without detaching the connecting pipes.



## SOFTWARE CHARACTERISTICS

- Dedicated software measures parameters to be processed, allowing calculation of speed, flow rate, isokinetic suction flow and nozzle to be used in samples of  $PM_{10}$  /  $PM_{2.5}$  in emissions (US EPA METHOD 201A).
- Calculations are compliant with EN ISO 16911-1.
- Calculation of measurement and collection points for circular and rectangular chimneys are in accordance with EN 15259 and EN 13284-1 standards.
- Calculation of density ( $O_2$  and  $CO_2$ ) and condensation.
- Darcy tube LEAK TEST.
- Execution of AUTOMATIC SAMPLING IN ISOKINETICISM (SRB version only) with continuous updating of flow aspiration at various fume velocity conditions. (Requires a LIFETEK XP-R series sampler).

### FLOW RATE MEASUREMENT

PRESSURES  
TEMPERATURE



### AUTOMATIC ISOCYNETIC SAMPLES

PRESSURES  
TEMPERATURE

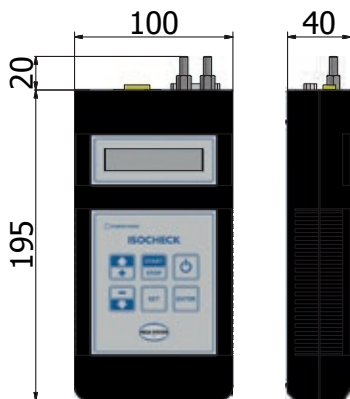


RS232



# ISOCHECK SERIES

## ISOCHECK SRB



## TECHNICAL SPECIFICATIONS

MODEL	BASIC ISOCHECK SRB	ISOCHECK SRB
<b>Interface, Data Archiving</b>		
Display	Alphanumeric LCD ( (16x2)	
Interface	USB (on Pen Drive)	
	-	RS232 for automatic isokinetic sampling with LIFETEK samplers
<b>Environmental Conditions</b>		
Working Temperature Range	0 °C ÷ +45 °C - 95% UR	
<b>Energy</b>		
Power	Input 230 Vac - 50 Hz Output 12 Vcc - 0,7 A	
Battery	Internal NiMH rechargeable	
Battery charger	Built-in Input 230 Vac - 50 Hz Output 12 Vcc - 0,7 A	
<b>Features</b>		
Weight	550 g	
<b>Supplied With</b>		
Case with shoulder strap		
Technical Manual		
Test report		

<b>Pressure Sensors</b>			
	Range	Resolution	Accuracy
Differential	0 ÷ 100 mmH <sub>2</sub> O (0 ÷ 1000 Pa)	0,01 mmH <sub>2</sub> O (0,1 Pa)	± 1%
Static	-1000 ÷ 1000 mmH <sub>2</sub> O (-10.000 ÷ 10.000 Pa)	1 mmH <sub>2</sub> O (1 Pa)	± 1%
Barometric (only SRB version)	800 ÷ 1100 mbar	0,1 mbar	± 2 mbar
<b>Temperature Input signals</b>			
	Range	Resolution	Accuracy
Type K Thermocouple	0 ÷ 1000 °C	0,1 °C	± 1%
Type J Thermocouple	0 ÷ 600 °C	0,1 °C	± 1%
Type T Thermocouple	0 ÷ 400 °C	0,1 °C	± 1%