

# X1-PROBE



- Heated probe
- Separate tube for gas sampling
- Independent temperature regulation (BOX/TUBE) up to 200 °C
- Auxiliary temperature sensor input plugs
- Data logger function
  
- Compliant with  
EN 13284-1  
EN 1948-1  
EN 14385  
EN 13211  
EN 1911



# X1-PROBE

Heated probes are used for emission sampling of dust, micropollutants, metals, and acids, in order to maintain a high temperature on the filtering medium due to the presence of condensable substances in the gas being collected.

The **X1-PROBE** is an innovative heated probe that uniquely includes, within the heated tube, a sampling tube, a measurement tube (Darcy), and a separate line for gas sampling.

The special armored stainless steel heating elements used for both the tube and the external box ensure excellent performance even in high-humidity stack conditions.

It can be used for sampling on any type of duct, thanks to the ability to separate the external box from the heated tube and rotate it 90°, making it ideal for sampling in horizontal ducts as well.



The external box can be connected to a containment tank for impingers, suitable for sampling metals/acids, or to the **X1-CONDENSER**, which is designed for sampling micropollutants/PAHs.

The additional gas sampling line can be connected to FID analyzers from any manufacturer, or to an independent line for dedicated sampling.

By connecting Mega System analyzers equipped with an Oxygen sensor (paramagnetic) and a Carbon Dioxide sensor (NDIR), it is possible to calculate the density of the gaseous effluent in compliance with current regulations, even during isokinetic sampling.

The temperature of both the heated tube and the external box is adjustable up to 200°C, and can be independently controlled via the THERMO temperature controller located beneath the external box.



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## CARATTERISTICHE TECNICHE \_\_\_\_\_

The thermoregulator is equipped with 2 input plugs for auxiliary temperature sensors and a USB port for data download. The data logger function can record temperature values at programmable intervals.

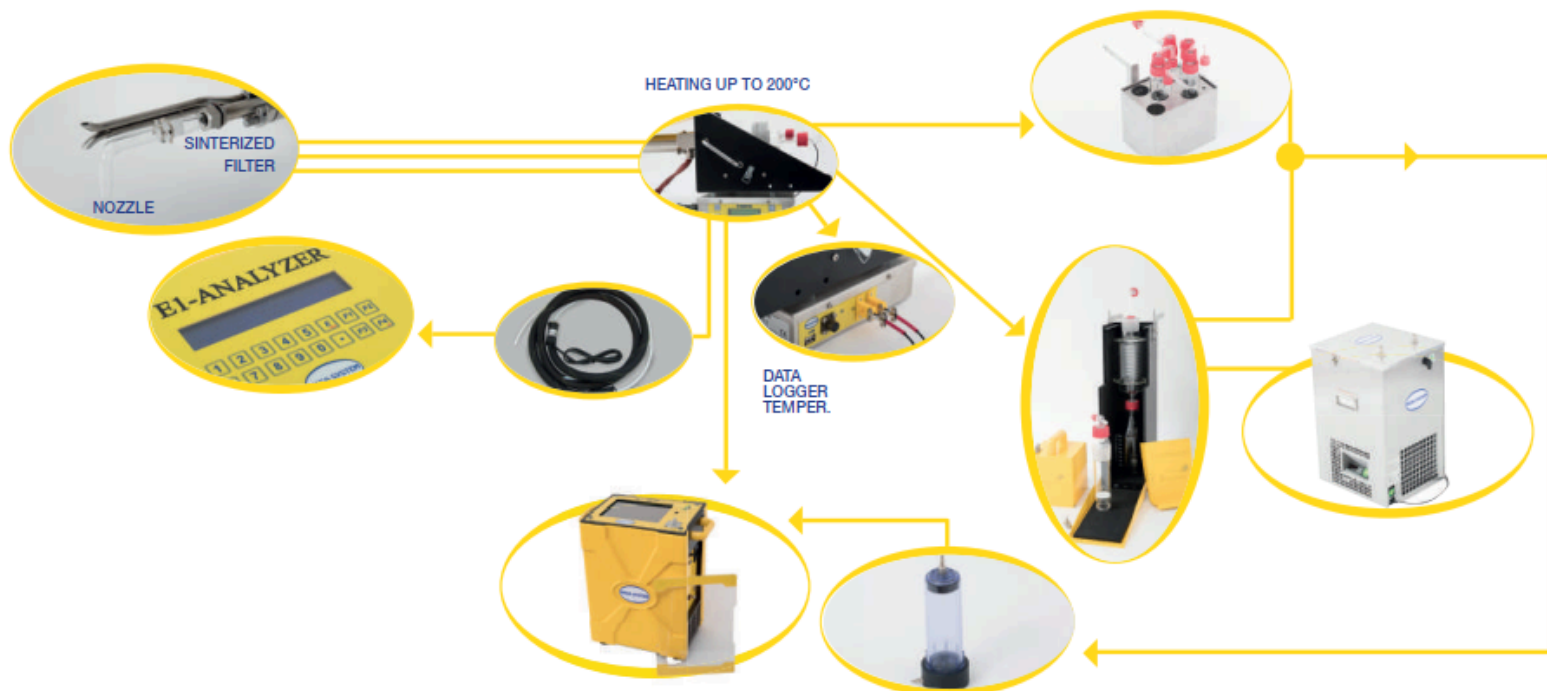
The T1 sensor is used to detect filter temperature inside the box, while the T2 sensor is used to detect the temperature at the condenser outlet for micro-pollutants.

On request, the probe may be predisposed for connection via serial cable to the XI-APIS isokinetic sampler, for the purpose of regulating and automatically recording all temperature signals from the probe to the X1-APIS.

The devices and accessories to be inserted in the heated probe are available in glass, quartz, titanium and stainless steel.

The heated probe is made of stainless steel to ensure the required resistance to temperature and corrosion caused by the aggressive gases in the duct, but the particular design of this unit makes it practical, light and easy to transport.

X1-Probes are available in various lengths: 500 mm - 1000 mm - 1500 mm - 2000 mm - 2500 mm - 3000 mm.



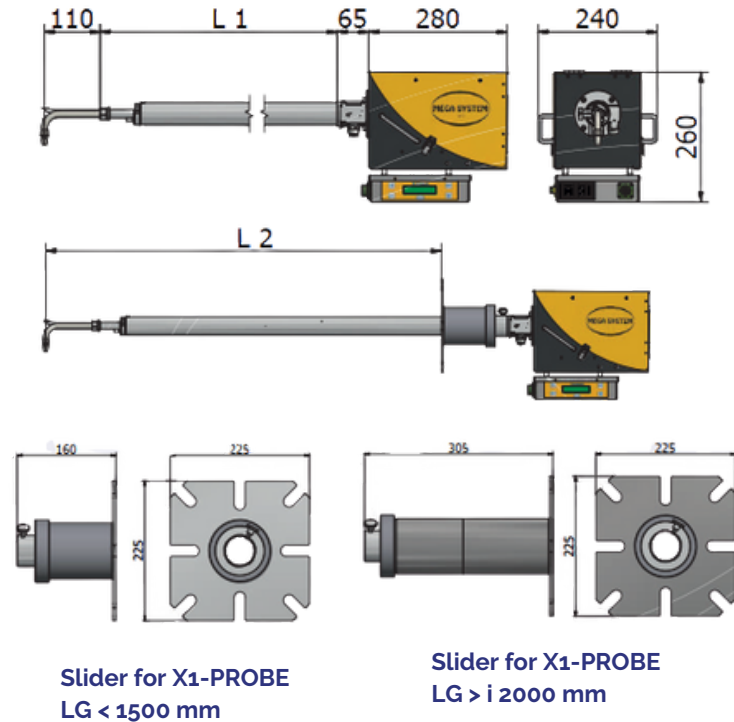
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## SPECIFICHE TECNICHE

• TEMPERATURE	
Tube heating temperature	Range: 100 ÷ 200 °C
Box heating temperature	Range: 100 ÷ 200 °C
Type J Thermocouple (T1)	Range: 100 ÷ 200 °C Resolution: 1 °C Accuracy: ± 2 °C
Type J Thermocouple (T2)	Range: 0 ÷ 50 °C Resolution: 1 °C Accuracy: ± 2 °C
• INTERFACE, DATA ARCHIVING	
Display	Alphanumeric LCD (16x2)
Interface	USB (on Pen Drive)
• ENVIRONMENTAL CONDITIONS	
Working Temperature Range	Range standard up to 200 °C Optional up to 350 °C
• ENERGY	
Power	230 Vac – 50 Hz
• CONSUMPTION	
Box	600 W
Tubes	Max 2000 W
• OPTIONS	
Connection to isokinetic sampler model X-APIS for temperature control via serial cable	
• SUPPLIED WITH	
Technical Manual	
Test Report	

STANDARD LENGTH (MM)	L WITH SLIDER (MM)
500	450
1000	950
1500	1450
2000	1660
2500	2160
3000	2660

## X1-PROBE



## X1- CONDENSER

