



We work *hard & smart* so you can have a *smart* life

HSP2 Heated Sampler Probe



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Our probe is designed to sampling particulate matter and chemicals in stacks. The heated filter box with quick connection to the heated probe is available in order to sampling particulate matter. Outstack filterholder and probe heated in order to prevent water vapour and some volatile organic compounds condensation.

It's design allow you to combine the probe with the probe stand, to move the probe freely all direction. You can also easily move the probe to determining swirl angle in accordance with the EN16911 and US EPA M1/2 . Depends on the stack position you can fix the probe in two different positions for vertical or horizontal stacks.

All parts exposed to chimney smoke are made of stainless steel which is accepted as AISI 316 and AISI 304. Pneumatic and electronic connections are combined in a compact single structure. The pitot tube and thermocouple are integrated into the probe body for use in more rugged and easier stacks.



Sampling Methods Accordance With:

- EN UNI 16911 : Determination of stack gas velocity and volumetric flow rate (Type S Pitot Tube)
- US EPA M2 : Determination of stack gas velocity and volumetric flow rate (Type S Pitot Tube)
- US EPA M4 : Determination of moisture contents in stack gases
- UNI EN 13284 : Stationary source emissions - Determination of low range mass concentration of dust
- US EPA 5 : Determination of particulate matter emissions from stationary sources (Out of stack)
- US EPA 17 : Determination of particulate matter emissions from stationary sources (In stack)
- EN 1948 : Stationary source emissions - Determination of mass concentration of PCDDs/PCDFs and dioxin-like PCBs
- EN 14385 : Stationary source emissions - Determination of the total emission of As, Cd, Cr, Co, Cu, Mn, Ni, Pb,Sb, Tl and V
- EN 1911 : Determination of mass concentration of gaseous chlorides expressed as HCL
- EN 15713 : Sampling and determination of gaseous fluoride contents
- EN 14791 : Determination of mass concentration of sulphur oxides
- EN 13211 : Stationary source emissions - Determination of the concentration of total mercury

Technical Features:

- Heated probe:

Heating control	: K-Type TC and ISO Smart Sampler
Temp. Range	: Programable range 50 ÷ 180 °C
Inside probe structure :	
- Pitot Tube inlet	
- Sampling inlet	
- Optional gas inlet	
- K-Type TC	
Materials	: Stainless steel
Available length	: 0.5 to 3 meters

- Heated filter box:

Heating control	: K-Type TC and ISO Smart Sampler
Temp. Range	: Up to 150 ÷ 180 °C
Inside box structure :	
- Probe inlet	
- Heating element inlet	
- K-Type TC	

- Cooler & condensing box:

Box impinger capacity	: 6 pieces
Connection to heated box	: Directly to back of the heated filter box
Cooling method	: Passive - With ice
Material	: Double painted aluminium

More Features:

- Modular assembling, rugged and easy to use
- Ready for swirl determination (digital inclinometer needed)
- Integrated type "S" Pitot tube
- Integrated K Type thermocouple for stack gas temperature measurement up to 1200 °C
- Freely removing stack gas temperature sensor to calibration
- Integrated K Type thermocouple for heating control of probe up to 200 °C
- Integrated separate gas sampling line (Optional)
- Easy internal sampling line replacement by your application need.
 - * Titanium GR2,
 - * Borosilicate glass,
 - * Quartz or AISI 304 inner tube.
- Suitable also for horizontal ducts

