



ENVIRONMENT

SAMPLING  
SOLUTIONS

MEGA SYSTEM

CALIBRATION  
& METROLOGY

# HORNET

- Compliant with ISO 12884, ISO 16362  
USEPA T09 e T013A
- Sampling  $PM_{10}$ ,  $PM_{2,5}$ , TSP,  
Micro-pollutants
- Venturi flow meter  
(ISO 5167)



CARE FOR THE  
ENVIRONMENT



# HORNET

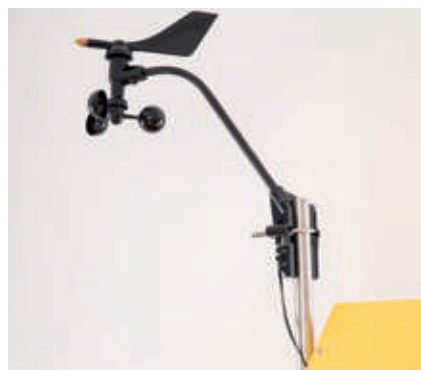
Hornet complies with ISO 12884 (particulate/gas), ISO 16362 (particulate), USEPA T09 and T013A (particulate / gas) standards.

It uses the Venturi flow meter and is made in accordance with ISO 5167.

HORNET is the High Volume control unit designed for OUTDOOR environments, for sampling TSP, PAH, micro-pollutants, PM<sub>10</sub> and PM<sub>2,5</sub>.

The instrument is equipped with a backup battery, which allows active programs to be paused in the event of a power failure. When the power comes back on, the instrument is able to resume sampling automatically and to record the event in the final summary.

In the Standard and Super version with PM<sub>10</sub>, PM<sub>2,5</sub>, PM<sub>1</sub> H.V. heads is possible to use a filter holder with membranes Ø 150 mm to sample dusts at a maximum flow rate of 500 L/min. Alternatively, using a filter holder for membranes Ø 102 mm complete of glass cartridge holder for PUF/XAD2, is possible to sample PAH, dioxins and furans in the gas phase at a flow rate between 200 and 280 L/min.



The instrument is equipped with a 4-stage 60 m<sup>3</sup>/h blower. The brushless motor guarantees continuous instrument operation over long periods with less maintenance.

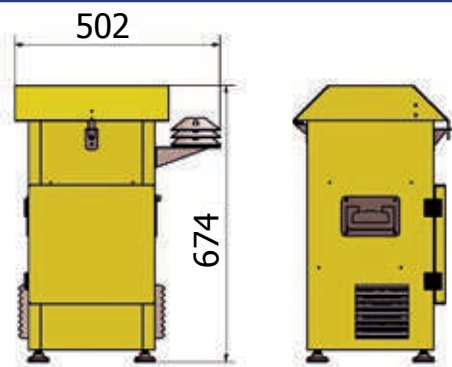
The electronic flow regulation system allows for real time sampling flow updates and guarantees constant volumetric flow in the sampling area. It also guarantees constant flow sampling with automatic compensation for load losses.

In the Standard and Super version is integrated a **GSM modem** for the remote management of sampling and alarms by sending a SMS (SIM not included).

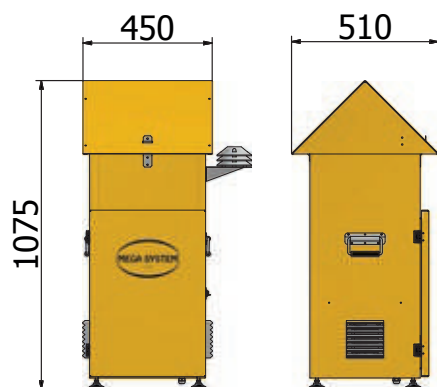
On the Light version is integrated a RJ45 ethernet which allow to use the web server functionality for the remote checking of sampling parameters. There is also the option to install weather sensors (wind velocity and/or direction) for selective sampling.



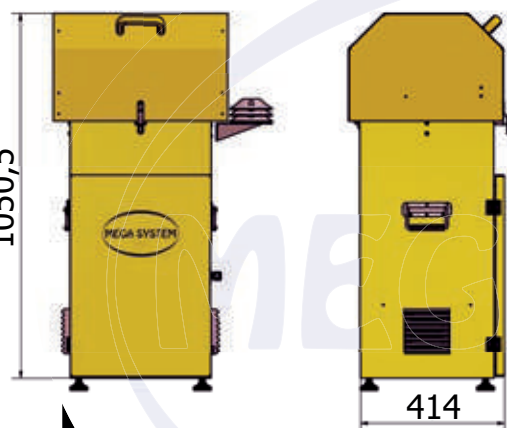
## LIGHT



## STANDARD



## SUPER



## TECHNICAL SPECIFICATIONS

MODEL	LIGHT	STANDARD	SUPER
■ Performance			
Flow sensor	Venturi		
Type of pump	4 stage blower		
Operating range	100 ÷ 600 L/min	100 ÷ 1000 L/min	
Flow resolution	0,1 L/min		
■ Interface, data archiving			
Display	Alphanumeric LCD (40x2)		
Interface	Ethernet RJ45 USB host (on Pen Drive)	RS232 USB host (on Pen Drive)	
GSM modem	-	✓	
■ Environmental conditions			
Working temperature range	-5°C ÷ 45 °C 95% UR		
■ Energy			
Power supply	230 Vac – 50 Hz		
Consumption	100 W	200 W	
■ Features			
Protection degree	IP55		
Noise level (8 m distance)	<33 dB(A)		
Peso	15 Kg	23 Kg	
■ Options			
Weather parameter sensors (wind speed and direction, humidity etc.)			
Stand for installation in fixed position, adjustable and desmountable			
Printer			
■ Supplied with			
Technical manual			
Test report			
■ Compatibility			
Filter holder ø 102 mm	✓	✓	
Filter holder ø 150 mm	-	✓	
Filter holder 203x254 mm	-	-	✓
Heads PM <sub>10/2,5/1</sub> H.V.	-	✓	

<b>■ Sensors</b>			
	Range	Resolution	Accuracy
Environmental temperature	- 10 ÷ 50 °C	0,1 °C	±1 °C
Inlet temperature	- 10 ÷ 50 °C	0,1 °C	±1 °C
Venturi cell differential pressure	± 1000 Pa	0,1 Pa	±1% FS
Venturi cell inlet pressure	0 ÷ 2000 kPa	0,1 kPa	± 1% FS
Atmospheric pressure	800 ÷ 1100 mbar	0,1 mbar	± 2 mbar