

SAMPLING
SOLUTIONS

MEGA SYSTEM

CALIBRATION
& METROLOGY

HORNET SERIES



- Compliant with:
ISO 12884
ISO 16362
US-EPA T₀₉
US-EPA T_{013A}
- Sampling of
PM₁₀, PM_{2,5}, PTS,
micro-pollutants
- Venturi** flow meter
(ISO 5167)



HORNET SERIES

The **HORNET** high volume control unit, designed for **outdoor environments**, is suitable for sampling **TSP, PAH, micro-pollutants, PM₁₀ and PM_{2.5}**.

- Compliant with **ISO 12884** (particulate/gas), **ISO 16362** (particulate), **US-EPA T₀₉** e **US-EPA T_{013A}** (particulate/gas).

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

The instrument is equipped with a **backup battery**, which allows active programs to be paused in the event of a power failure. Once power is restored, the instrument automatically resumes sampling and logs the event in the final summary.

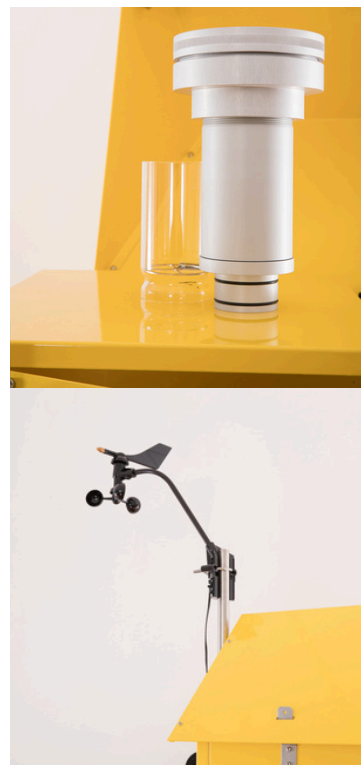
In **Standard Hornet** and **Super Hornet** version with PM₁₀, PM_{2.5}, PM₁ H.V. heads is possible to use a filter holder with membranes Ø 150 mm to **sample dusts** at a maximum flow rate of 500 L/min.

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.



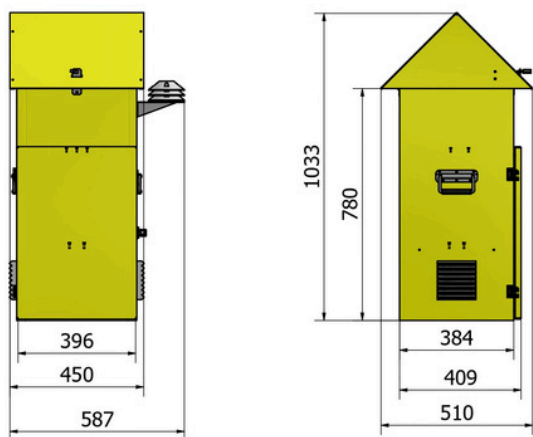
HORNET SERIES

- The instrument is equipped with a 4-stage 60 m³/h blower. The brushless motor guarantees continuous instrument operation over long periods with less maintenance.
- The electronic flow regulation system enables real-time updates to the sampling flow, ensuring a constant volumetric flow within the sampling area. It also maintains consistent flow sampling by automatically compensating for load losses.
- The **Standard and Super versions** include an integrated GSM modem for remote management of sampling and alarms via SMS (SIM card not included)
- The **Hornet Light** version include an ethernet port, enabling the activation of the web server service for remote monitoring of sampling parameters.
- It is possible to install sensors for detecting **weather parameters** (wind speed and/or direction) for selective sampling.

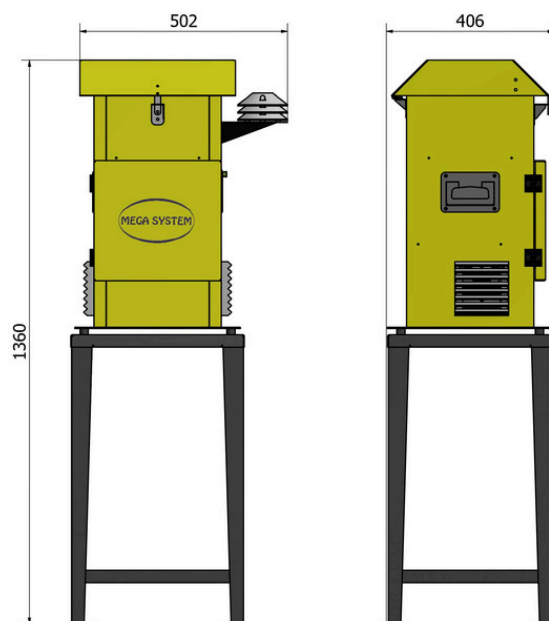


HORNET SERIES

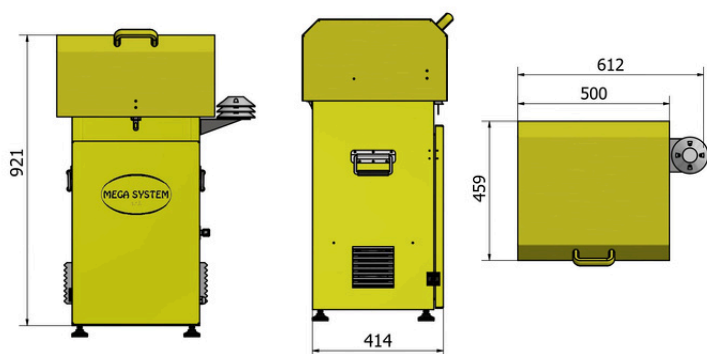
STANDARD



SUPER



LIGHT



HORNET SERIES

TECHNICAL FEATURES

VERSION	LIGHT	STANDARD	SUPER
• PERFORMANCE			
Flow sensor	Venturi		
Type of pump	4 stage blower		
Operative 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 USBhost (on PenDrive)	RS232 USB host (on Pen Drive)	
Modem GSM	-	✓	
• ENERGY			
Power supply	230 Vac – 50 Hz		
Consumption	100 W	200 W	
• FEATURES			
Protection degree	IP55		
Noise level (8 m distance)	<33 dB (A)		
Pump weight	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 ₁₀ /PM _{2,5} / PM ₁ H.V.	-	✓	

• SENSORS			
	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