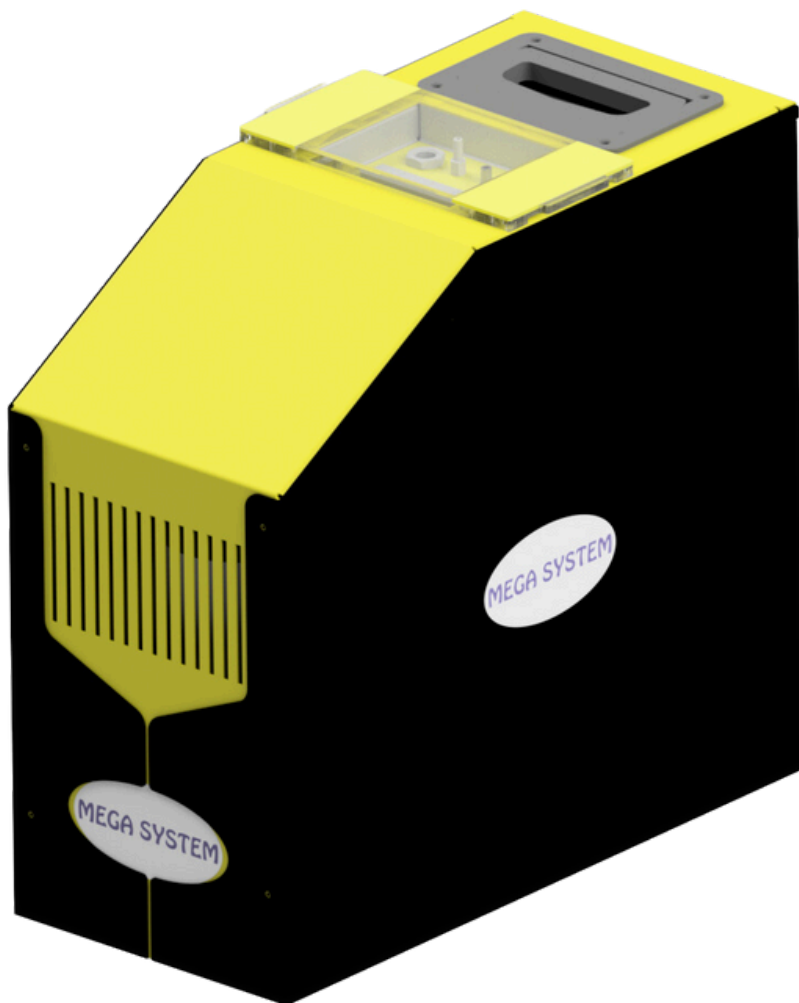


ARTIK AIR

NEW



- Cooling Peltier's system and compressor
- Optimized heat exchanger: reduces contact between gas and condensate
- Compressor with high cooling capacity
- Display dew point indication
- Automatic pump management
- Output temperature verifiable by an external thermocouple
- Gas-wetted parts entirely in stainless steel/PTFE/borosilicate
- Portable and ergonomic design

Artik Air is a **gas conditioning system** designed for emission sampling, optimized for use with combustion gas analyzers.

The system has **two key strengths**:

1. An innovative **two-stage design**: pre-condensation with compressor cooling and cooling with Peltier cells
2. A **borosilicate heat exchanger structure** that reduces the contact time between the sample gas and the condensate, minimizing the solubilization of volatile components (e.g., SO₂) that would otherwise be lost in the liquid phase.

Artik Air includes a **membrane pump** resistant to corrosive gas attack, with high pressure and flow rates exceeding what is normally required by gas analyzers. The pump is **internally regulated** by a temperature sensor that activates the suction once the user-set point is reached and turns it off in case of exceeding a safety temperature.

The gas outlet temperature from the system can be easily checked with an **external thermocouple** and fully complies with the **UNI EN 15058 standard** (< 4 °C), without requiring the use of thermocouples installed inside the system, which cannot be properly verified by a calibration thermometer chain.

The **peristaltic pump** installed in the system allows for the automatic and continuous removal of condensate, which can be collected, if necessary, for subsequent laboratory analysis via a pneumatic connection.

An **external display** shows the gas outlet temperature, which is monitored by the electronics and kept constant.

The **ergonomic design**, optimized for **reduced dimensions and weight**, facilitates easy handling of the system, despite the **high cooling capacity** that allows its use even under conditions of high temperature and humidity in the incoming gas.

TECHNICAL FEATURES

• ENVIRONMENTAL CONDITIONS				
Temperature	0-45 °C 95%RH			
• ELECTRICAL				
Power supply	230Vac - 50Hz			
Power consumption	Max. 200W (250W with Peltier)			
• INTERNAL SENSORS				
	Pt	Range	Resolution	Precision
Compressor and Dew Point temperature	100	-70 +250 °C	0,1°C	1%
• SUCTION PUMP				
Suction pump type	Membrane pump			
Maximum suction flow	> 3 L/min			
Power-on mode	Automatic when set point reached			
Safety shutdown	Automatic when the safety threshold is exceeded			
• PERISTALTIC PUMP				
Safety shutdown	Automatic when the safety threshold is exceeded			

• SYSTEM FEATURES	
Cooling capacity	> 500 W @ Tc 40°C, Te 10°C (+50W with Peltier)
Cooling liquid	R290
Weight	about 15 Kg (17 Kg with Peltier)
• OPTIONS	
Particle filter	
Customisable air inlets for heated probes	

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