



# ALTAIR OSM Kit Wet

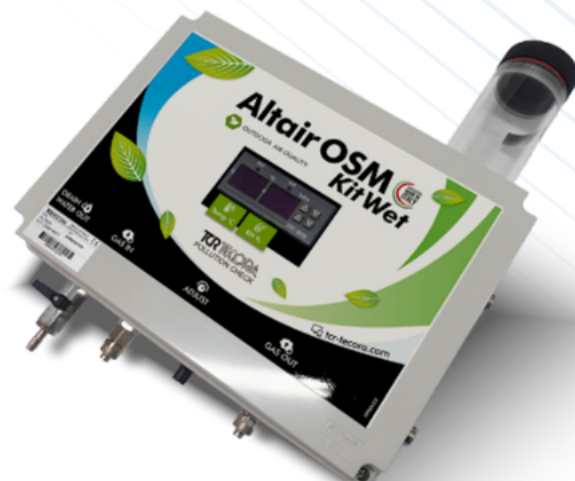
## Controlled gas sample humidification system

**ALTAIR OSM Kit Wet** is a system designed to **control and increase the humidity of gas samples** intended for analysis.

The sample, collected from a sampling line or from a dry gas source, enters the system through a series connection.

Inside the instrument, the gas is **conditioned using Nafion™ controlled humidification technology**, allowing the set humidity levels to be reached and maintained.

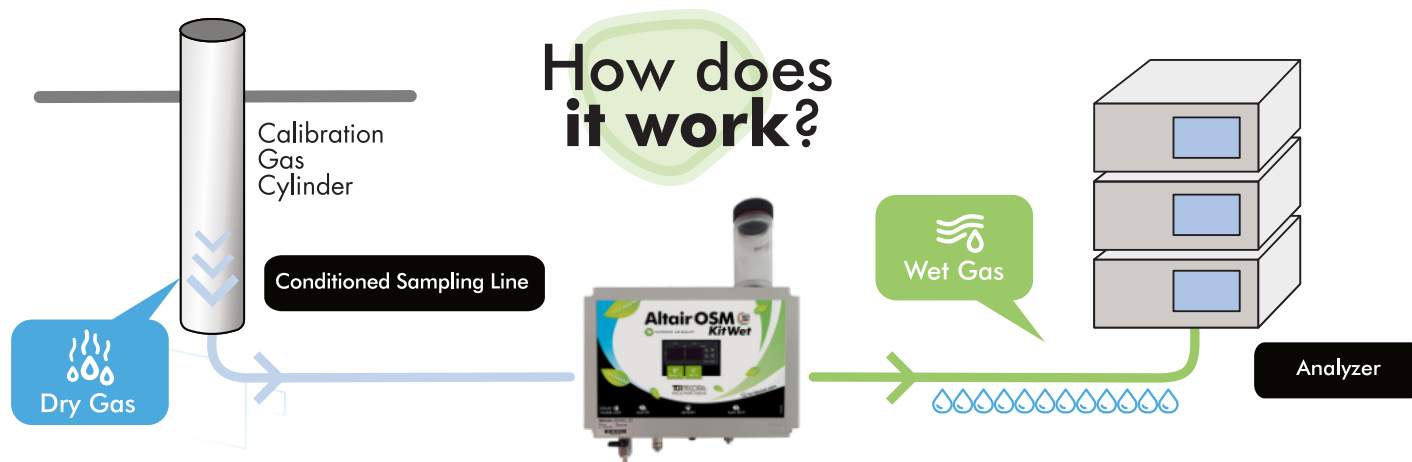
Relative **humidity and temperature parameters** are displayed in real time on the LCD display.



### ADVANTAGES

- Active control of sample humidity;
- Stabilization of analyzer operating conditions;
- Continuous monitoring of temperature and humidity.

## How does it work?



### OPERATING PRINCIPLE

Dry gas → **Active humidification system**  
 → Controlled humidified gas

The system uses the selective transfer of water vapor through a Nafion™ membrane, enabling a controlled increase in humidity content **without contaminating the sample or altering the concentration of dry-form analytes**.

It is well known that excessively dry samples can **affect the response of sensors and analyzers**, causing **signal drift and measurement instability**. Some technologies (electrochemical, PID, etc.) require a **minimum humidity range** for proper operation.

Without humidity control, a **systematic error (matrix effect)** is introduced between calibration conditions and real operating conditions.





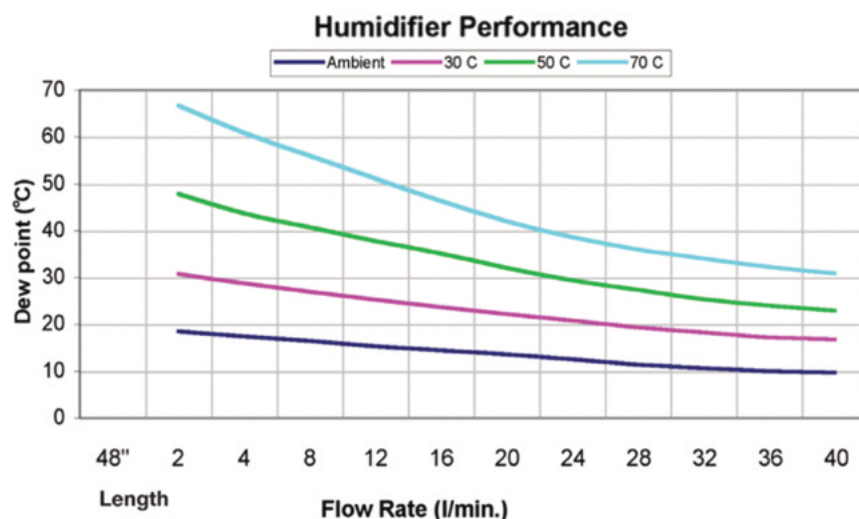
# TCRTECORA<sup>®</sup>

## POLLUTION CHECK



### TECHNICAL SPECIFICATIONS

|                     |                                                                                       |
|---------------------|---------------------------------------------------------------------------------------|
| Maximum Flow        | 2l/min                                                                                |
| Maximum Performance | Dew point increase up to +18 °C with water at room temperature (Tamb. 25 °C, 2 L/min) |
| Set Point           | Configurable RH set points for: activation, shutdown, and alarm threshold             |
| Temperature         | -10 to +50°C (0.1°C resolution)                                                       |
| Relative Humidity   | 1 to 99% (0.1% resolution)                                                            |
| Connections         | PTFE 6x4 mm                                                                           |



### TYPICAL APPLICATIONS (INTEGRATED)

- Humidification of cylinder calibration gases for representative real-world calibration conditions
- Calibration and verification of gas analyzers (NDIR, FTIR, UV, chemiluminescence)
- Characterization of water vapor interference on sensors
- Dynamic gas dilution systems
- Conditioning and stabilization of electrochemical and PID sensors
- Mobile laboratories and air quality monitoring stations
- Continuous gas analysis systems (CEMS) and field quality control tests
- Test benches and validation of analytical instrumentation

### KEY FEATURES

- Controlled gas sample humidification system
- T/RH sensors with configurable thresholds
- LCD display for real-time parameter visualization
- Manual set-point adjustment
- Standard PTFE 6 × 4 mm connections
- In-line installation on any gas sampling system
- No sample contamination: humidity transfer only

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