



## DOUBLE ADVANCED ION MOBILITY SPECTROMETER - DAIMS



The DAIMS is equipped with two high-resolution ion mobility spectrometers continuously working in positive and negative polarity. Thanks to the plasma ionization source and the continuous operation in both polarities, DAIMS offers the highest sensitivity for volatiles organic compounds (VOCs), toxic organic compounds (TOCs), acids and industrial pollutants. The additional advantage of Double Advanced Ion Mobility Spectrometer is its 6 independent sample ports, which allow air quality monitoring from 6 independent points from a distance of up to 50 meters.

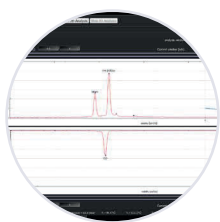
The DAIMS has been developed in collaboration with LastMile company for 24/7 indoor air quality monitoring in industrial buildings. The DAIMS is designed for real-time control, monitoring and exchange of indoor air in smart buildings.

## DESIGNED FOR:

- Indoor air quality monitoring
- Sick buildings monitoring
- Air quality monitoring in industrial buildings
- VOCs and TOCs monitoring
- Odors and pollutants monitoring
- Trace gasses detection
- Processes control

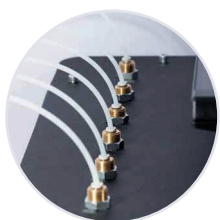


## MAIN FEATURES:



### Operation in Double polarity mode

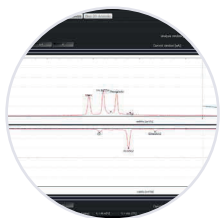
The DAIMS operates simultaneously in positive and negative polarity without the need of switching between polarities. This significantly increases the sensitivity and selectivity of the instrument. In positive polarity, the reactant ions (RI)  $H^+ \cdot (H_2O)_n$  result in proton transfer reaction while in negative polarity the  $O_2^-$  RI ions result in charge exchange reaction with analyte.



### 6 independent sample ports

The 6 independent sample ports are integrated in DAIMS. Each sample port is connected to small rotary vane pump which allows monitoring of 6 independent points. The distance of each point can be up to 50 meters from the instrument. The sample ports can work separately or together.

The number of working ports as well as the working time and duty cycle is optional and easily manageable by MaSaTECH control software. The acquired data from each sample port can be recorded or they can be sent for online monitoring.



### Peak track function and automatic peak recognition

The DAIMS control software is equipped with automatic peak recognition function. This feature allows automatic recognition of new peak formations. Based on the unique reduced mobility, the detected peaks are automatically compared with our library of chemical compounds.



### Zero operation cost for 24/7 operation

Thanks to the MaSaTECH air purification system, the operation cost of DAIMS instrument is zero. DAIMS is able to operate 24/7 without the requirement of any special gases. This asset makes DAIMS a comfortable and cost effective instrument.