



CONFIGURABLE AIMS



Configurable Advanced Ion Mobility Spectrometer (AIMS) is an excellent tool for monitoring fast processes with high sensitivity requirement. In addition to detection of volatile and semi-volatile compounds, our IMS is the only one in the field with is suitable for solids analysis and surface analysis. The AIMS from MaSaTECH can easily achieve the resolution of up to 90 FWHM (full width half maximum), which makes it an instrument with highest resolving power in the field.

The high performance Corona Discharge ion source outperforms the conventional ions sources used in IMS and the high on current is responsible for the ultra-high sensitivity of the advanced ion mobility spectrometer. It is a perfect solution for those who need specific layout of all AIMS components. The main components of Configurable AIMS are Engine and Control Unit. Individual parts maybe spaced at a distance of 0.5-2m.

| | |
|------------------------|-------------------|
| Working pressure | 600 - 1200 mbar |
| Working temperature | 30 - 120 °C |
| Resolving power N2/Air | 90/100 FWHM |
| Sensitivity | ppb |
| Drift gas flow | 500 - 1200 ml/min |
| Sample gas flow | 5 - 500 ml/min |

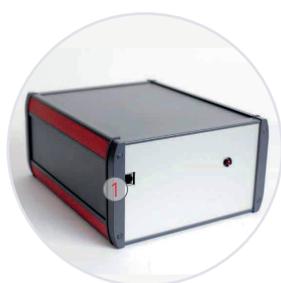
| | |
|-----------------------|-------------------|
| Drift field intensity | 200 - 560 V/cm |
| Polarity | Positive/Negative |
| Ionization source | Corona Discharge |
| Pre-separation | MCC - GC |
| Power supply | 250V/24V |



DESIGNED FOR:

- 2D analysis of complex matrix
- Fast and remote monitoring of processes
- Product quality control in industry
- Volatile organic compounds monitoring
- Trace gases detection, gas detector
- Analysis of solids and surfaces
- Explosives detection
- Drug quality control
- Interface to Gas Chromatograph or to Multi Capillary Column Gas Chromatograph
- Research laboratories
- Environmental monitoring
- Indoor/Outdoor air quality monitoring
- Chemical analysis

AIMS CONTROL UNIT



- ① PC control (Ethernet connector)
- ② HV 5pin connector
1x +/-10kV output
1x +/-15kV output
1x HV -SG input
2x HV -SG control output
- ③ +/-150V output for Aperture Grid (BNC connector)
- ④ Sync TTL output (BNC connector)
- ⑤ Firmware upgrade (RS232 connector)
- ⑥ Pump power supply (3pin connector)
- ⑦ Amp. power supply (3pin connector)
- ⑧ 25pin connector
1x Drift Tube temp. control
1x Sample Inlet temp. control
1x Amplifier Fan
1x Drift Tube Fan
- ⑨ Signal input (BNC connector)

AIMS ENGINE



- ① Sample inlet (1/16" connector)
- ② Signal output (BNC connector)
- ③ Amplifier power supply (3 pin connector)
- ④ Drift gas inlet (3mm connector)
- ⑤ Pressure control (3mm connector)
- ⑥ HV 5pin connector
1xHV - Target electrode input
1xHV - SG output
2xHV - SG control input
- ⑦ Alternative gas exhaust (6mm connector)
- ⑧ Gas exhaust (6mm connector)
- ⑨ HV - Corona Discharge Input (SHV connector)