

# UltraViolet-Ion Mobility Spectrometer



**Sensitive detection of gaseous  
Volatile Organic Compounds (VOCs)**

## UltraViolet-Ion Mobility Spectrometer (UV-IMS) – Your easy-in-use analytical Tool

The UV-IMS offers excellent features for fast and sensitive detection of gaseous traces of VOCs, especially aromatic compounds and an outstanding linear range of up to 4 orders of magnitude. Results are typically available within seconds and in the ppbv-range. Its modular concept and accessibility of parameters allows to configure and fine-tune the device according to the specific analytical measurement assignment.

### Features

- Stand-alone unit with integrated computer
- Operation mode: open system using external gas supply
- Sampling: direct inlet, membrane inlet system, or electrical six-port-valve with sample loop
- Temperature control for membrane inlet system and six-port-valve (up to 80°C)
- Access to all relevant parameters for method development
- Internal pump for continuous sample introduction
- Manual or fully-automatic operation mode including data acquisition, -analysis, visualization and transfer to external devices
- Storage of data on internal memory or external network shares
- Adaptable to external devices (gas chromatograph, auto-sampler, etc.) with automated start via trigger

### Applications

- Quality control
- Residual solvents
- Authentication
- Alternative GC detector

### Technical Specification

<b>Working principle:</b> Ion Mobility Spectrometry
<b>Ionisation:</b> Ultra violet light (photo ionisation)
<b>Source:</b> 10.6 eV lamp
<b>Drift voltage:</b> Positive
<b>Sampling:</b> Direct, membrane or electrical 6-port-valve
<b>Range:</b> Semi-quantitative, typically ppbv
<b>Dynamic range:</b> 3-4 orders of magnitude
<b>Display:</b> 6.4" TFT, VGA-Display
<b>Input unit:</b> Rotary pulse encoder
<b>Processor:</b> 400 MHz X-scale
<b>Data acquisition:</b> Ultra-fast ADIO-board
<b>Data processing:</b> X-board / Baseboard
<b>Data storage:</b> 2 GB Compact-Flash
<b>Communications:</b> RS232, USB, Ethernet
<b>Electrical connectors:</b> 2 x D-Sub 9-pole (for modem, console), D-Sub 15-pole (for external devices), RJ45 (for digital modem or SSH), 2 x USB-A
<b>Power supply:</b> 100-240 V AC, 50-60 Hz (external supply), 24 V DC / 5A, XLR-connector (internal)
<b>Power consumption:</b> < 180 Watt
<b>Dimensions:</b> 449 x 375 x 177 mm (WxDxH)
<b>Weight:</b> 13 kg
<b>Housing:</b> 19" compatible, IP 20 enclosure, EMC certificated
<b>Cooling:</b> Axial ventilator, temperature controlled, max. 5.5 m <sup>3</sup> /h
<b>Gas connectors:</b> 3 mm stainless steel Swagelok connectors for gas in- and outlet