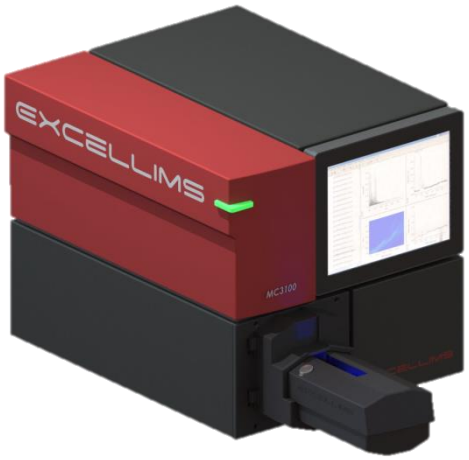
Product Specifications

Excellims MC3100
Compact High Performance Ion Mobility Mass Spectrometer

Integrated compact desktop chemical analysis / identification system based on both ion mobility and m/z measurements in seconds, providing capability of separating isobaric compounds and measuring molecular collision cross section

- Two dimensional chemical identification based on ion mobility library and m/z
- Mass analysis after high resolution ion mobility separation for high speed chemical ID in seconds
- Powerful tool for isomer analysis
- Total flexibility for user defined ion pre-filtration prior to mass analyzer
- Flexible modes of operation allow freedom in experiment design
- Able to use to a variety of sample introduction / ionization sources, including Excellims' Infusion, Directspray™, and Thermal Desorber



Excellims offers a compact ion mobility mass spectrometer system based on its proven high performance ion mobility spectrometry (HPIMS™) in combination with a miniaturized ion trap mass spectrometer. The MC3100 is the first small-footprint analytical system that identifies chemicals based on both ion mobility and ion mass; it offers superior isomer separation and chemical identification capability while providing chemical structure information via direct collision cross-section measurements.

Several modes of operation are available, including IMS-only, MS-only, and simultaneous IMS-MS to produce a two dimensional mobility vs. m/z plot.

Alternatively, the IMS can be used as a prefilter for the mass spectrometer: particular mobility peaks can be selected for mass analysis, or particular mobility peaks or mobility ranges can be blocked from entering the mass spectrometer. By removing or including specific mobility-selected ions for subsequent MS and MS/MS analysis, spectral complexity and congestion can be reduced. By enriching desirable ion populations, the MC3100 delivers added confidence in compound identification.

HPIMS™

EXCELLIMS
Innovation for Excellence in Detection Technology

Hardware

Excellims MC3100

Drift tube length	~10 cm
Drift tube voltage	Up to 10 kV
Ion gate pulse width (Bradbury-Nielson entrance & exit gates)	From 30 µs up to the maximum drift range setting
Mass analyzer	Ion trap
Vacuum system	10^{-5} torr

Performance Characteristics

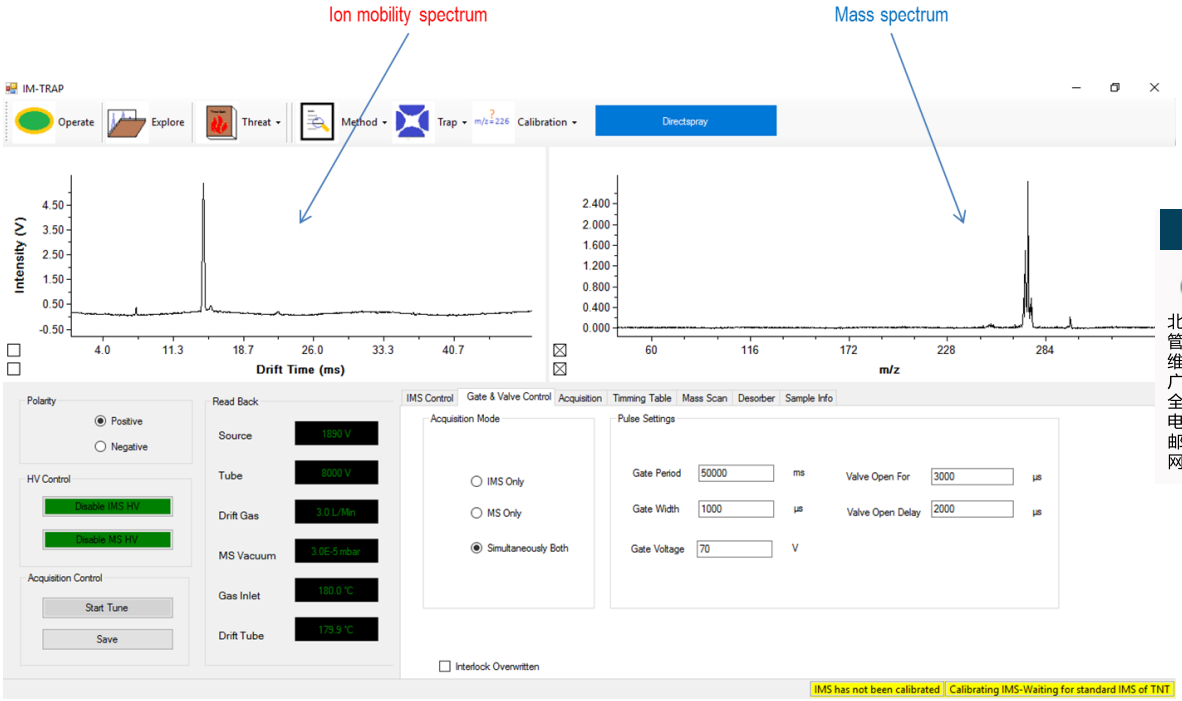
Mobility resolving power	60-120
Drift time range	0-50 ms
Drift time accuracy	±30 µs
Drift gas	N_2, Air, He, etc.
Operating temperature	30-250°C
Operating pressure	Ambient conditions
Mass resolution	Unit

Software

Excellims Vision™ Trap	MC3100 Software package includes control and data acquisition software for fully integrated HPIMS and ion trap mass spectrometers
Excellims VisIon™ Analysis	For post data processing of both ion mobility and m/z data, offering 2D data visualization and chemical identification

Sample Introduction Options

Infusion ESI source	Continuous liquid sample introduction; compatible with the use of an autosampler or HPLC
Directspray™ ESI source	Rapid liquid sample screening; no additional pump needed
Thermal Desorber with Corona Discharge Ionization source	Solid phase sample introduction
Direct gas phase sample inlet	Gas phase sample introduction



咨询联系方式

绿绵科技 Lumiere Tech Ltd.

北京绿绵科技有限公司售后服务通过SO9001质量管理体系认证，用户可以得到标准化的安装、调试、维护、保养。 绿绵科技负责该仪器在制定区域推广及技术服务。

全国服务电话400-810-8267

电话：010-82676061/2/3/4/5/6/7

邮箱：marketing@lumtech.com.cn

网址：www.lumtech.com.cn

Excellims Corporation
20 Main Street
Acton, MA 01720
www.excellims.com
T.978.264.1980

Copyright © 2017 *All rights reserved*

EXCELLIMS

Innovation for Excellence in Detection Technology