

ionSense®



Real Time Science Solutions

# Open Air Ionization Mass Spectrometry



## Direct Analysis in Real Time Mass Spectrometry

has been improved with the implementation of the SVP controller and redesign of the DART source.

**DART® SVP** technology enables routine operation by adding a robotic sample presentation system to improve capability for quantitative as well as qualitative analysis. SVP stands for “Standardized Voltage and Pressure” which translates into more reliable desorption ionization. The redesigned DART source has lower background, an easily replaceable grid, and needle too, meaning you can keep performance at like new condition for years to come.

## Web Based Software

Web based interface makes method development easy.



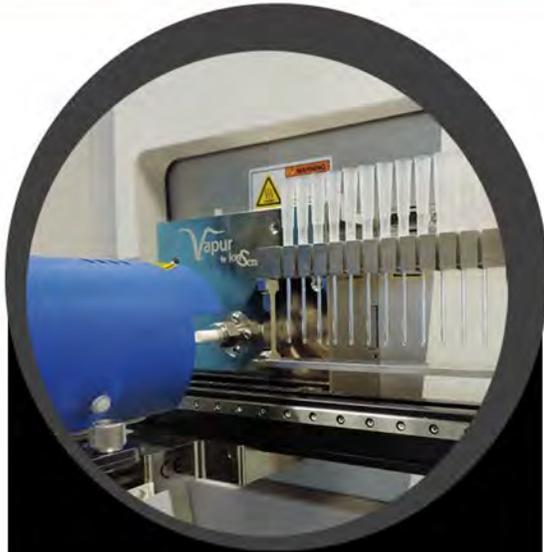
## DART® SVP

Select a temperature, ion polarity, and analyze your sample in seconds.

**ionSense**  
Real-time science solutions

DART sources are available for LC/MS instruments from AB SCIEX, Agilent, Bruker, JEOL, Shimadzu, Thermo and Waters

# Experiment Modules



## Multi DIP-it® Holder

Increasing sample throughput for analysis of liquids is enabled with the 12 DIP-it® sampler. Using more accurate positioning provides the means for rapid quantitative analysis.



## Adjustable Tweezer Base

Enable precise, automatic, method-based sampling of single tablets and other objects for analysis with the DART SVP using the Adjustable Tweezer Base.



## X-Y Scanner

Complete chemical analysis of larger format surfaces in minutes under digital control. Investigate imperfections to learn more about your sample.



## TLC Block

The TLC Block permits scanning of flat objects such as glass slides and thin layer chromatography (TLC) plates. Reproducible positioning of these objects provides for more accurate sampling allowing determination of relative retention time for example.



## Tablet Carrier

The Tablet Carrier provides the means for comparative determination of the composition of up to 10 samples in under 2 minutes per temperature setting. More reliable position leads to more accurate quantitative analysis even as the samples are consumed at high temperatures.

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**Thermo**  
SCIENTIFIC



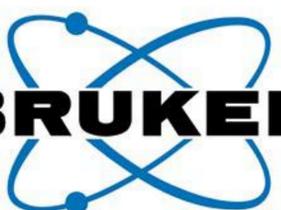
Agilent Technologies

 **SHIMADZU**

**AB SCIEX**

**JEOL**

Waters

 **BRUKER**

## Distributors

**USA:** JEOL, [jeolusa.com](http://jeolusa.com) | **Australia:** Accurate Mass Scientific Pty Ltd, [accuratems.com](http://accuratems.com)

**Canada:** VBM Science, [vbmscience.com](http://vbmscience.com) | **China:** ASPEC Technologies, [aspectechnologies.com](http://aspectechnologies.com)

**UK & Europe and Baltic States:** MSCi, [msconsult.dk](http://msconsult.dk) | **Japan:** JEOL Ltd, [jeol.com](http://jeol.com) | AMR Inc.Ltd, [amr-inc.co.jp](http://amr-inc.co.jp)

**Korea:** SCION Instruments, [scioninstruments.co.kr](http://scioninstruments.co.kr)

## OUR TECHNOLOGY

**Direct Analysis in Real Time (DART®)** is a technology that enables rapid desorption and detection of representative chemicals from virtually all surfaces: from the exotic to those that make up everyday products. Our technology provides a means to ionize molecules and present them for analysis at atmospheric pressure which enables elimination of many time consuming, costly steps typically utilized for chemical analysis. This picture shows our DART source mounted on a Waters QDa mass detector.



### Helping you solve problems

IonSense's technology provides near instantaneous determination of the content of a sample by ionizing intact molecules from the surface of the sample. The high ratio of primary molecule to molecular fragment is one of its most unique attributes. This allows rapid and unambiguous identification of unknowns.



IonSense DART technology stands unique in its capability to generate ions from any form of matter: gases, liquids, and/or solids. The method is easy to use and has been offered commercially with compatible LC/MS systems that are already deployed in laboratories that are tasked with quality assurance and research and development initiatives. DART dramatically increase the capabilities and performance of instruments already offered by the leading OEMs in this industry.

### DART for all

In its third generation of refinement, DART® Technology is now available in multiple configurations. DART is available with custom interfaces for attaching to mass spectrometers manufactured by all of the premier scientific instrument manufacturers, AB SCIEX, Agilent, Bruker, JEOL, Shimadzu, Thermo, and Waters. DART is available for use on all types of mass spectrometers including: time of flight, QTOF, quadrupole, triple quadrupole, ion traps, FTMS and Orbitraps.



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## OUR PRODUCTS

### DART® SVP

DART source with built in automated sampling robotics featuring an web based software-enabled controller. The SVP (standardized voltage and pressure) provides an easy to program controller capable of communication with other vendors' instruments and automated sample handling devices designed to meet your sampling requirements.



### X-Z SCANNER

A low cost flat sample scanner for high throughput analysis of samples or inspection of surfaces without contact. The X-Z Transmission Module capable of presenting 96 samples for analysis in under 16 minutes is shown here. For optimum speed in sampling we suggest the Apricot i-Pipette which enables simultaneous disposition of small volumes appropriate for DART analysis onto the X-Z Transmission Module screens. Imagine, 10 seconds to spot and completed analysis of 96 samples in under 20 minutes. Screening simplified and a new level of brand protection for the products you company makes!



### DART-OS™

The OS uses our patented desorption system to allow you to desorb molecules in a closed environment. Dopants can be added in a few seconds by simply removing the magnetically fixed cover and inserting the desired solvent capsule in the volume. Current customers can just add the OS-Module for use with a DART SVP ionization source. Just purchase 2000 OpenSpot cards and the Module is yours to keep.