



### Open Letter to Organic Chemist:

Have you heard of direct analysis in real time mass spectrometry? It is literally the easiest form of ionization available to organic chemist who want mass spec results. We call it the DART® source.

Its been available for about 4 years for high end LC/MS system, but until now its price has been high so very few academic labs have them

Its now available for just about any LC/MS, and **its now a lot less expensive.**

What does it do for you?

1. Detect reaction products and reactants generating either protonated molecules in positive ion mode or deprotonated molecules negative ion mode within seconds after you sample your reaction mix
2. Sampling involves simply dipping a melting point capillary into any liquid containing your molecules and then passing the end of that tube through the desorption ionizing gas exiting the DART source.
3. No LC required, your product does not have to be soluble in aqueous solvents, sample from any solvent. You can even sample direct from your NMR tube if you want.

How does it work? DART uses metastable atoms to activate atmospheric water molecules so they donate a proton to your products. The very same gas can also generate negative ions for acidic molecules, without solvent manipulation.

**The DART does not require an LC, no need to consider solubility, no need to clean up your reaction mixture.** Just sample from your reaction mix and use the data to monitor the progress of your reactions.

Literature citations available from Analytical Chemistry document the performance of DART against conventional electrospray, and our recent article with Merck scientists document high throughput assessment of reaction efficiency (references available on request).

If you are interested in availability and cost of a DART for your mass spectrometer kindly email me at [info@ionsense.com](mailto:info@ionsense.com). Mention **DART 100S** in the subject line and your contact info in the email.

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