

Fast Separations for your Mass Spec

ZipChip™ uses integrated microfluidic technology to prepare, separate and electrospray biological samples directly into traditional mass spectrometers (MS). With little or no sample preparation, cost-effective ZipChips analyze a broad range of matrices from growth media to cell lysates, blood, plasma, urine and biopharma products. ZipChip delivers answers on analytes from small molecules and peptides up to intact proteins, antibodies and antibody drug conjugates.

Unlike liquid chromatography, ZipChip separations are inherently nano. This means you make no trade-off between speed and sensitivity; and you don't need to be an expert to achieve optimal results. Using ZipChip, superior analyte separations are typically achieved within 3 minutes and with only nanoliters of sample injected. Additionally, large molecules can now be analyzed in intact, near-native states with a mass spectrometer providing valuable molecular information on every species detected. ZipChip fully integrates capillary electrophoresis (CE) and electrospray ionization (ESI) into a single microfluidic device. This eliminates failure-prone junctions between separate components and the 'dead volumes' common to traditional capillary-based approaches. The result is no wasted time, band broadening, or failure points—just fast separations.

FULL SYSTEM AUTOMATION

ZipChips are simple to use. Just load the chip and your samples are ready for analysis. This process is simplified with unique chip recognition, preprogrammed methods and the use of premixed ZipChip Assay Kits that are optimized for each sample type. When coupled with the autosampler, the ZipChip platform allows unattended analysis of samples loaded in standard 96-well plates and vials. The autosampler primes chips, loads samples and cleans up between runs. Integrated chillers hold sensitive samples at pre-set temperatures while awaiting analysis. Combining rapid automation with 2-3 minute separations equals significant productivity gains and lower error rates for your laboratory.

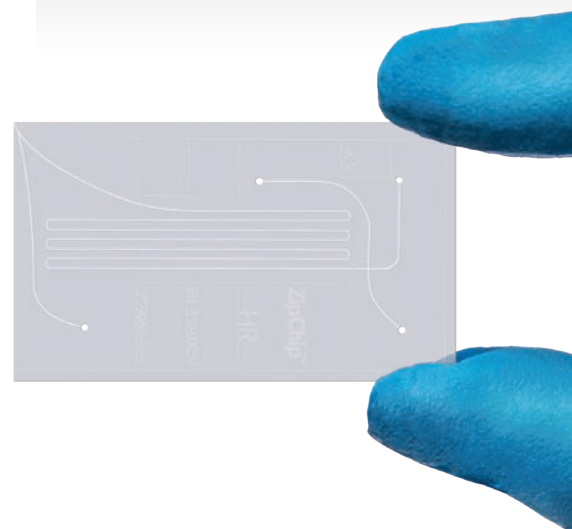
The ZipChip Interface mounts easily and quickly to your existing MS instrument. It synchronizes all electrical and fluidic connections and alignment of the chips ESI is automatically positioned at the inlet of the MS - no manual alignment required. Analysis is triggered by the software or automatically through autosampler sequences. The ZipChip Interface seamlessly connects to your MS instrument so current software tools can be used for data analysis, reporting and output.



ZipChip

HIGHLIGHTS

- Direct interface to traditional MS instruments
- Fast analysis: < 3 mins per samples
- Low sample volume injection, nL scale
- Minimal sample preparation, no de-salting
- Unique measurement capabilities: Antibodies and ADCs
- Autosampler for unattended operation

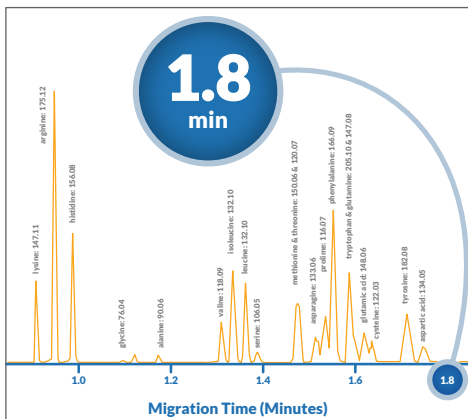




ZipChip seamlessly connects to your MS instrument so current software tools can be used for data analysis, reporting and output.



When combining ZipChip with the ZipChip Autosampler, users achieve unattended 3-minute sample runs from sample vials or 96 well plates.



Using ZipChip HS, full Amino Acid profiles and the majority of metabolites are directly measured in less than 3 minutes.



Prepackaged ZipChip Assay Kits reduce risk of operator error and offer convenience for efficient sample analysis.

ZipChip is subject to export controls including those of the Export Administration Regulations of the U.S. Department of Commerce, which may restrict or require licenses for the export of product from the United States and their re-export to and from other countries.
 Patented technology www.908devices.com/patents
 © 2017 908 Devices

Interface Specifications

Mounting Configuration	All Thermo Fisher Scientific Exactive, Q Exactive Orbitrap, and LTQ-Orbitrap MS instruments.
Operation	- Fully automated - Push button start
Software	- ZipChip software for configuration of injection parameters - Integration with Thermo Fisher Scientific Xcalibur software for data collection, processing and reporting
Dimensions	8in (h) x 8in (w) x 11in (d)
Weight	7lbs
Power Requirements	110/240V

Autosampler Specifications

Sample Format	Vials or standard well plates (47mm max height)
Sample Capacity	- Fully automated - Push button start
Sample Tray Cooling	Integrated Peltier Cooling Range: 4°C to Ambient -3°C (at relative humidity of 80% and ambient temperature of 25°C)
Software	- ZipChip software for configuration and set up of sequences and run parameters. - Routines for automated chip priming and unattended operation
Dimensions	14 in (h) x 12 in (w) x 22 in (d)
Weight	46 lbs
Stackable weight	143 lbs
Power Requirements	110/240V

ZipChip provides unique microfluidic preparation and separation of Bio-compounds for mass spectrometers:

- Intact Proteins & Antibodies
- ADC's
- Peptide Mapping
- Cell Lysates
- Amino Acids & Metabolites
- Growth Media

ABOUT 908 DEVICES

908 Devices Inc. is democratizing chemical analysis by way of mass spectrometry. We make products ranging from rugged, handheld chemical detection tools to compact, tiny footprint analyzers and fast separation devices. These purpose-built and user-centric devices serve a range of industries including safety and security, life sciences, oil & gas, and other applied markets.

