



PRODUCT SPECIFICATIONS



ZipChip system hardware for Orbitrap technology

Fast, sensitive and accurate CE/ESI for your Orbitrap mass spectrometer

Benefits

- Direct interface to MS instruments
- Fast analysis: 2–3 min per typical run
- Low sample volume injection, nL scale
- Minimal sample preparation, no de-salting
- Unique measurement capabilities: antibodies and ADCs
- Autosampler for unattended operation

The 908 Devices™ ZipChip™ system coupled to the Thermo Scientific™ Q Exactive™ hybrid quadrupole-Orbitrap™ and other compatible mass spectrometer platforms can characterize a wide range of bio-analytes via unique microfluidic capillary electrophoresis (CE) separation and high-resolution accurate-mass (HRAM) mass spectrometry identification. This exceptionally fast, sensitive, and accurate CE/ESI-MS workflow complements LC-MS technology to address analytical challenges in biopharma.

The ZipChip system and compatible MS platforms can quickly analyze intact mAbs in native, partially denatured, and fully denatured conditions to support characterization of biotherapeutics under a diverse range of conditions. Heterogeneous ADCs can be successfully characterized in under 3 minutes by utilizing a ZipChip system and Q Exactive MS workflow with Thermo Scientific™ BioPharma Finder™ software. Fast, sensitive, and accurate antibody subunit analysis can be accomplished by the ZipChip system and Q Exactive Plus, Q Exactive HF, and/or Q Exactive HF-X MS BioPharma option platforms. The combination of the ZipChip system sample separation, Q Exactive MS produced HRAM MS and MS/MS spectra, and BioPharma Finder software enables fast and accurate peptide identification.

Full system automation

ZipChip systems 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 different sample types. When coupled with the autosampler, the ZipChip system allows unattended analysis of samples loaded in standard 96-well plates and vials. The autosampler primes chips, loads samples and cleans and refreshes the BGE 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.

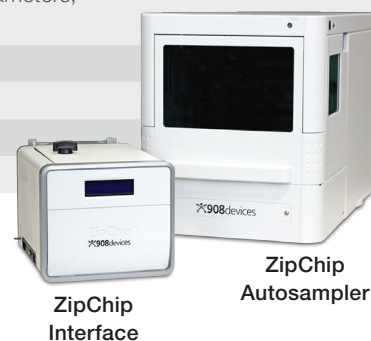
The ZipChip Interface mounts easily and directly to your compatible Thermo Scientific MS instrument. It synchronizes all electrical and fluidic connections and alignment of the chips. ESI is automatically positioned at the inlet of the MS—no manual alignment required. Analysis is triggered by the software 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.

The ZipChip system provides unique de-salting and separation of biomolecules in a wide range of bio-matrices:

- Intact proteins and antibodies
- ADCs
- Peptides
- Amino acids and metabolites

ZipChip specifications

Interface	
Mounting Configuration	All Thermo Scientific™ Exactive™, Q Exactive™, and LTQ Orbitrap™ MS instruments
Operation	Fully automated version and manual version both available
Software	ZipChip software for configuration of injection parameters; Data collection, processing, and reporting are through Thermo Scientific™ Xcalibur™ software
Dimensions (h × w × d)	8 × 8 × 11 in.
Weight	7 lbs.
Power Requirements	110/240 V
Autosampler	
Sample Format	Vials or standard well plates (47 mm maximum height)
Sample Capacity	Fully automated
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 (h × w × d)	14 × 12 × 22 in.
Weight	46 lbs.
Stackable Weight	143 lbs.
Power Requirements	110/240 V



Find out more at thermofisher.com/zipchip

For Research Use Only. Not for use in diagnostic procedures.

The ZipChip Interface is a Class 1 Laser Product (complies with 21 CFR 1040.10 and 1040.11 except for deviations pursuant to laser notice No. 50).

