



# HIGH-PERFORMANCE LIQUID CHROMATOGRAPHY COUPLED TO A MASS SPECTROMETER

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FABRICANT : Thermo Scientific

MODÈLE : UPLC Dionex Ultimate 3000 MS LTQ XL

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## Characteristics

- Quantitative and semi-quantitative analysis of rapid organic compounds (ultra pressure liquid chromatography)
- Identification of unknown organic molecules (UPLC-MS coupling)
- Column pressure limit: 200 bars
- PPB detection limit
- Ability to analyze 4 samples per hour (carousel for 120 samples)
- Unit's sensitivity (resolution): 10-2 ua
- UV-visible detector (4 simultaneous wavelengths)
- Mass analyzer: ion trap
- Ionization source: electrospray ionization (ESI)
- Mass range of 50 to 4,000 m/z
- Columns: C3, C8, C18, NH2, amide-C16, Plgel

## Samples

- Liquids
- Size of samples: 1 mL
- Injection volume of 10 to 30  $\mu$ L.

## Examples of nanotechnology applications

- Identification and quantification of organic impurities
- Identification of unknown organic compounds