



SINGLE QUADRUPOLE MASS SPECTROMETER WITH TLC PLATE READER (TLC/MS)

(mod. Advion Expression CMS-L detector)

VENDOR: FOCUS ANALYTICS SRL

YEAR OF ACQUISITION: 2023-2024

SUPERVISING FACULTY MEMBER: Prof. Claudio Curti

Technical features:

- Mass range: 10-2000 m/z .
- Scan rate: 10,000 amu/sec.
- Ionization source: Atmospheric Pressure Chemical Ionization (APCI).
- Isocratic solvent pump, equipped with digital display and controlled by keyboard, with settable flow rate from 0.001 to 10 ml/min.
- Sample can be introduced by:
 - Flow Injection Analysis (FIA), through the integrated injection valve.
 - Using a glass capillary tube, for solid samples.
 - Using the Plate Express TLC plate reader.
- Available acquisition modes: Full Scan MS or Selected ion Monitoring (SIM).
- Workstation for instrument control and data analysis with Advion Mass Express e Advion Data Express software.

Applications:

- Rapid MS check of compounds obtained by chemical reactions.
- Direct and automated mass analysis of spots obtained by TLC-separation of crude reaction mixtures, avoiding the scraping of the spots from the TLC plate or further steps for sample preparation.

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