

Specification Sheet

LCMS-8030

Triple Quadrupole Mass Spectrometer

The LCMS-8030 is Ultra Fast Triple Quadrupole Mass Spectrometer.

The LCMS-8030 couples the power of Triple Quadrupole Mass Spectrometer with unparalleled speed to provide the ideal compliment to both UHPLC and HPLC systems.

UFSweeper technology efficiently accelerates ions out of the collision cell, dramatically minimizing cross talk and shortening MRM analysis time to lowest possible.

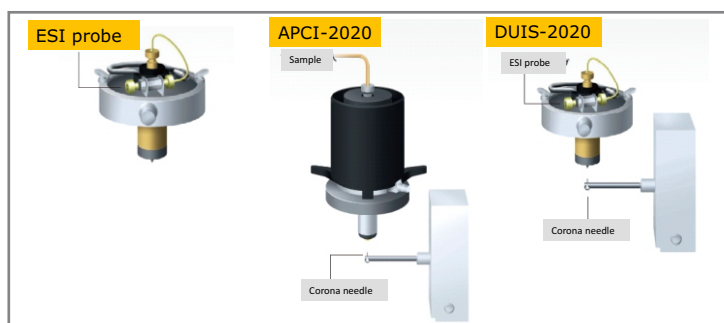
With Ultra Fast MRM transitions and Ultra Fast polarity switching, LCMS-8030 is truly a universal detector for UHPLC or HPLC.



HARDWARE SPECIFICATIONS

API SOURCE AND OPTIMIZATION MODES

- Electrospray ionisation mode, ESI [standard]
- Atmospheric pressure chemical ionisation, APCI [Optional]
- Dual ion source [ESI/APCI], DUIS [Optional]



MS ACQUISITION MODE

- Q1 scan (Max 512 events), Q1 SIM (Max 512 events x 32 Channel)
- Q3 scan (Max 512 events), Q3 SIM (Max 512 events x 32 Channel)

MS/MS ACQUISITION MODE

- Synchronised Multiple Reaction Monitoring [MRM]: More than 15,000 MRMs are definable in one method.
- Product ion scans (Max 512 events)
- Precursor ion scans (Max 512 events)
- Neutral loss scan (Max 512 events)
- Synchronized Survey scan: MRM triggered product ion scan

MASS ANALYZER AND DETECTOR

Mass Analyzer: Molybdenum hyperbolic mass filter with pre-rod
 Collision Cell: Octopole type collision cell with UFSweeper Technology
 Detector: Secondary electron multiplier with conversion dynode
 Detection system: Pulse counting

VACUUM SYSTEM

Rotary pump: Vacuum speed: 28 m³/hr
 Triple-inlet turbo molecular pump:
 Inter stage 40 L/sec
 Main stage 260 L/sec
 Side stage 210 L/sec

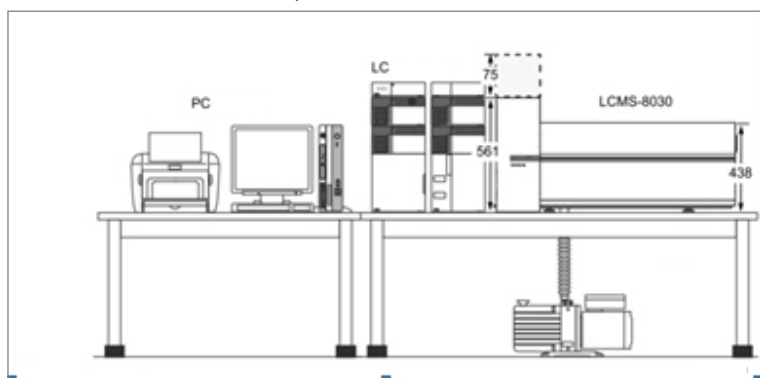
WORKSTATION

- LCMSsolution Version 5 for LCMS-8030
- Operation system: Windows 7
- Automated tuning and calibration
- Automated optimization of MRM transitions
- Efficient data processing
- Instrument Control: HPLC (Prominence and Nexera series)
- Seamless control of LCMS-8030 with HPLC Interface

PERFORMANCE SPECIFICATIONS

Mass Range:	m/z 10 to 2,000 Da
Maximum scan speed:	15,000 amu/sec
Minimum Dwell time:	1 msec
Minimum Pause time:	1 msec
MRM Transition speed:	Maximum 500 MRM/sec
Mass Stability:	The mass accuracy is ± 0.1 Da over 24 hours
Mass Accuracy	± 0.1 amu or better
Polarity switching time:	15 msec to switch between positive and negative polarity
Mass Resolution:	>0.7 Da, automatically adjusted across the entire mass range
MRM Sensitivity ESI [positive mode]:	The signal to Noise ratio for chromatographic peak obtained when 1 pg of reserpine is injected on column is >200 RMS

INSTALLATION REQUIREMENTS



Temperature: 18 to 28° c
Humidity: 40 to 70% [No condensation]
Size: 1178mm [W] x 530mm [D] x 561 mm [H]
Weight:

Power supply: MS unit: AC 200V 15A [50/60 Hz]
Single-Phase
PC: AC 100V [50/60 Hz]
HPLC: AC 100V [varies depending on the system configuration]

Gas: Nitrogen gas:
Maximum consumption 25L/min

Argon:
Purity greater than 99.99% as CID gas

For More Information

Please contact your local Shimadzu representative or directly contact us at sales@shimadzu.com.sg or visit our website <http://www.shimadzu.com.sg>



79 Science Park Drive #02-01/08, CINTech IV
Singapore Science Park 1, Singapore 118264

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Speed Beyond Comparison