

## Specification Sheet

# LCMS-8030

## Triple Quadrupole Mass Spectrometer



Triple Quadrupole Mass Spectrometry is the method of choice for definitive identification and reproducible quantification of trace level analytes in complex samples. Shimadzu understands these requirements. That is why we have combined our experience from different fields for building a mass spectrometer that can keep pace with the chromatographic resolving power of our world leading UHPLC systems. The LCMS-8030 couples the power of TQ-MS with unparalleled speed to provide the ideal compliment to both UHPLC and conventional HPLC systems. With high speed MRM transitions, ultra high speed polarity switching and unique UFsweeper™ technology, the LCMS-8030 is truly a universal detector for liquid chromatography.

### Instrument

Model:	LCMS-8030
Mass range:	<i>m/z</i> 10 to 2000
Sensitivity:	ESI positive: 1 pg/μL reserpine, S/N>200 (RMS)
Resolution:	R < 0.7 FWHM
Mass stability	0.05 / 12hr
Cross talk	<0.003%
Minimum pause time:	1 msec
Minimum dwell time:	1 msec
Scan speed:	Max 15,000 u/sec
Polarity switching time:	15 msec
Interface:	ESI (Standard) APCI (Option) DUIS (Option)
Applicable flow rate:	ESI 1μL/min to 2mL/min
MRM transition speed:	Max 500 channels / sec
DL maximum temperature:	300°C
Block heater maximum temperature:	500°C

### Measurement mode

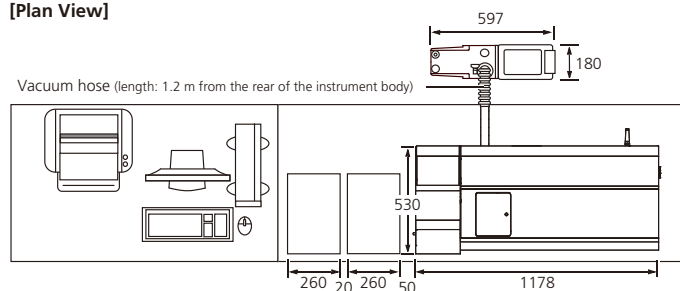
	Q1 Scan/SIM
	Q3 Scan/SIM
	MRM
	Precursor ion scan
	Product ion scan
	Neutral loss scan
[Mass Analyzer and Detector]	
Mass analyzer:	Molybdenum hyperbolic mass filter with pre-rod
Collision cell:	Octopole type ultra-fast collision cell (UFsweeper™ collision cell)
Detector:	Secondary electron multiplier with conversion dynode
Detection system:	Pulse counting
Detection ion:	Positive / Negative ion switching

## Software

Workstation:	LabSolutions LCMS Version 5.4 for LCMS-8030
Operation system:	Windows 7
Instrument control:	HPLC (Prominence and Nexera™ series) LCMS-8030 and interface
MS acquisition mode:	Scan (Max. 512 events), SIM (Max. 512 events x 32 channels)
MS/MS acquisition mode:	MRM (Max. 512 events x 32 channels) Product ion scan (Max. 512 events) Precursor ion scan (Max. 512 events) Neutral loss scan (Max. 512 events)
Auto-tuning:	Possible to optimize sensitivity and resolution in both positive and negative ionization mode as well as mass calibration

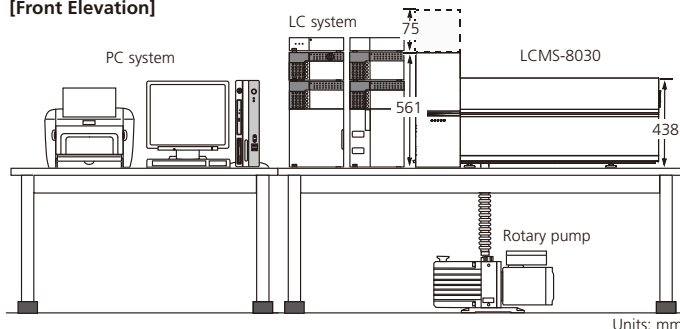
## Installation Example

### [Plan View]



Temperature:	18 to 28°C
Humidity:	40 to 70% (No condensation)
Size:	1180mm (W) x 530 mm (D) x 560mm (H)
Weight:	130 kg
Power supply:	MS unit: AC 230V 15A (50/60Hz) Single-phase
Gas:	Nitrogen gas: Purity greater than 97%, Maximum consumption 25L/min Argon: Purity greater than 99.99% as CID gas

### [Front Elevation]



## For More Information

For more information on Shimadzu products, visit our website at <http://www.shimadzu.com/>

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**SHIMADZU CORPORATION. International Marketing Division**  
3. Kanda-Nishikicho 1-chome, Chiyoda-ku, Tokyo 101-8448, Japan  
Phone: 81(3)3219-5641 Fax: 81(3)3219-5710  
URL <http://www.shimadzu.com>

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