



Email : sales@laboratoryinstrumentindia.com

**Product Name :**  
Liquid Chromatography Mass Spectroscopy Triple Quadra  
pole LC-MS and MS

**Product Code :**  
LBNY-0001-500005



**Description :**

Liquid Chromatography Mass Spectroscopy Triple Quadra pole LC-MS and MS

**Technical Specification :**

**Triple Quadrupole LC/MS**

Delivers superior sensitivity for trace level analysis with performance specifications in signal-to-noise (S/N) and instrument detection limit (IDL). IDL is a rigorous, statistically based metric that indicates practical sensitivity performance of your quantitative assays.

Achieves sensitivity and resolution specifications with auto tune.

The triple quadrupole provides superior analytical sensitivity, renowned reliability, and overall system robustness. proven choices for quantitative applications in food testing, toxicology, and environmental analyses

Single point of control: Single-point data system method capability with full control of HPLC systems and Triple Quadrupole LC/MS System

LC Part: Double-piston with high flow constancy and low pulsation, 30,000:1 Noise 1 pg on column injection with flow rate of 0.4ml/min in the range of 609 to 195m/z

Signal-to-Noise ratio (S/N) ESI negative measures > 10,000:1 Noise 1 pg on column injection with flow rate of 0.8ml/min in the range of 321 to 152 m/z

Mass range: 2 to 2050 m/z

Polarity switching: 20 ms

Mass resolution (auto tune): measures Full width at half maximum: 0.75 Da or better

Mass resolution (manual tune): FWHM : > 0.5 Da

Mass accuracy:

From 2 – 1,000 m/z - 0.01% max

Greater than 1,000 m/z - 0.02% max

Mass stability: 0.1 Da over 24 hr

Dynamic range: 4 x 10<sup>6</sup> or better

Scan modes: MS scan, MS/MS product ion scan, MRM, MS/MS neutral loss/gain scan and precursor ion scan, SIM

Maximum scan rate: Up to 10,000 Da/s

Minimum MRM dwell time: 1 ms

MRM transitions: 1000 per time segment > 32,000 ion transactions per MRM channel

Dynamic MRM transitions

Triggered MRM transitions: up to 1000 MRM channels when operating in GLP or for library search and compound confirmation

Collision cell ion clearance: Nitrogen Generator: With all its accessories (for at least 3 years)

Capacity: Generates 32 L/min at 6.9 bar / 1.13 CFM at 100 psi

Operating Temperature: 5°C to 35°C

Relative Humidity: up to 80% Non-Condensing

Operating Altitude: Which is suitable for the Ethiopian (Addis Ababa) altitude range

Particles: Gas Outlets: 1x 1/4" BSP Female

Phthalates – None

Suspended Liquids: None

Noise Level: 99.99%, pure 1 cylinders gas with appropriate two stage pressure regulator should be offered

LC Tool kits and LC standards: Caffeine standards kit for LC OQ/PV ESI+APCI LC demo sample for performance verification and training

Pump Kits: pump performance maintenance kit

Auto sampler preventive maintenance Kits

Detector maintenance Kits with chemical kit PM kits. Consists of: source component, ESI probe, Probe components and vacuum pump components

Nebulizer tools: Nebulizer adjustment fixture

Tool for user serviceable elements like Screwdriver, wrench and others

Uninterrupted power supply (UPS): 5KVA or highest UPS suitable for the LC/MS/MS

Accessories: Low concentration tuning mix, performance check solutions: 100ml for each unit and 3pack

Needle and Needle Seat, Cartridge injection valve, Air filter side panel, Screw, Gold seal, Ferrules, Syringes, Tubing's and capillaries, Label kit, Needle, Preventive maintenance

cleaning kit, Solvent Bottle, O-ring, Ion source cleaning kit, ESI and API source service kit,

Air filter kit and all other components which enable an instrument run for at least one year to full capacity.

Columns:

C18: 4.6 x 150 mm, 3.5 μm - (Qty = 2pcs)

C18: 2.1mm x 50mm 1.7μm - (Qty = 2pcs)

C18: 4.6 x 100 mm, 2.7 μm - (Qty = 2pcs)

Guard Columns (Guard Cartridge): 2 pcs for each column indicated above

LC/MS/MS chemical supplies:

Positive and negative ion performance standard check and verification

MS/MS Supplies:

LC/MS PM Kit: rotary performance maintenance kit, with chemical kit consists of source component, ESI probe and vacuum pump component

Fore line vacuum pump oil - 3L



**Laboratory Instrument India**