

Dycor Mobile Quadrupole Mass Spectrometer

SPECIFICATIONS

ANALYZER

SOURCE SENSITIVITY (Faraday Cup): 2.0E-4 amps per torr at detector (Measured with nitrogen at mass 28 with peak width = 0.5 at 10% height and 1.0E-3 amps emission current).

EMISSION CURRENT: Continuously variable from 1.0E-4 to 1.0E-2 to operate and 5.0E-2 to degas.

ELECTRON ENERGY: Continuously variable from 30 to 150 electron volts to operate and 250 electron volts to degas.

ION ENERGY: Adjustable from 1 to 10 electron volts.

MASS FILTER: Stainless steel rods held by precision alumina collars. Each rod is .25 inches in diameter by 4.5 inches long.

DETECTOR: Electron multiplier for gains up to 1.0E+4 or Faraday Cup detector.

MAXIMUM TEMPERATURE: 350°C with electrometer removed for baking.

NOTE: The M Series control unit may be located up to 1500 feet away from the quadrupole head. It has a 12 inch diagonal high resolution CRT which continuously displays the date and time.

ELECTROMETER

MAXIMUM MEASURABLE CURRENT: 1.0E-8 amps.

DYNAMIC RANGE: Auto ranging over six orders of magnitude down to 1.0E-15 amps.

ACCURACY: 1% of signal from 1.0E-13 to 1.0E-8 amps.

SPEED: Operator controlled.

SYSTEM

POWER REQUIREMENTS: Power for Quadrupole Supply.
110-120 VAC or 220-240 VAC at 200 watts 50/60Hz.

Power for Control Unit

110-120 VAC or 220-240 VAC at 120 watts 50/60 Hz.

MASS RANGE:

Model M100, MA100, M100M, MA100M: 1-100 AMU

Model M200, MA200, M200M, MA200M: 1-200 AMU

SCANNING SPEED: 3 milliseconds to 16 seconds per sample, adjustable.

DATA OUTPUT: High resolution CRT screen for data viewing in graphical or tabular format and RS-232 interface for computer or graphics printer.

RESOLUTION: Adjustable for constant peak width (.5 AMU at 10% height) for constant transmission (peak width will vary).

STABILITY: Mass position will vary no more than .1 AMU after 30 min. warm-up. Peak height will vary no more than 2% per 5 hours after warm-up.

MOBILE CART SYSTEM: Dimensions 52 in. High x 19 in. Wide x 16 in. Deep. Weight: 180 lbs.

The mobile cart is manufactured of aluminum structural tubing which is T.I.G. welded into a compact unit. The cart is painted with a prime coat and a finish coat. Finish coat color is Oyster Grey. The cart is equipped with rubber wheels and casters.

NOTE: Specifications subject to change without notice.

AMETEK

PROCESS AND ANALYTICAL INSTRUMENTS DIVISION • 150 FREEPORT ROAD, PITTSBURGH, PA 15238
TELEPHONE: (412) 828-9040 TELEX: 6714789 FAX: (412) 826-0399