OsmoMATE^{Cryo}

Technical specifications:

Principle of measurement : Cryoscopic, freezing point.

Sample type : Serum, plasma, urine and aqueous solutions.

Sample volume : 50µl standard

Sample capacity : Single sample

Calibration : Automatic, free selection of three point or a

two point

Test duration : <50 seconds for most samples.

Sample throughput : ~ 50 tests per hour.

Warm-up time : < 10 minutes.

Range : $0 \text{ to } 3000^{+} \text{ mOsmol/kg}$

Units : mOsmol/kg or Osmol/kg H₂0.

Resolution : One mOsmol/kg

Linearity : Less than \pm 1% in the range of calibration.

Repeatability : (i) 0 to 400 mOsmol/kg $\leq \pm 2$ digits

(ii) 400 -1500 mOsmol/kg $\leq \pm 0.5\%$ mOsmol/kg

(iii) 1500 to 3000 mOsmol/kg $\leq \pm 1\%$ mOsmol/kg H₂0.

Display : 5.7 inch LCD colour touch screen.

Sample cooling : Air cooled independent peltier elements for

quick sample cooling, and ice crystal format with special blower for heat dissipation, no coolant fluid.

Data interface output : (i) 2 x RS232 for external printer or PC

(ii) 2x USB for external printer/barcode (iii) Dedicated position for built-in LIS

(iv) Data download with USB to LIS or pen drive.

Communication

(a) Options : (i) Built-in dot matrix ribbon printer, economical

to use, permanent record of data.

(ii) External inkjet or dot-matrix printer with

RS232 or USB ports.

(b) Data input : Bar code reader (optional, reader)

On board storage : Vast memory to store 4000 test results with

calibration and control data for storage and

review and download

Operating temperature : Ambient +5 to 35°C

Power supply : $220 \text{ V} (\pm 10\%) 50 \text{ Hz}$

Power consumption : 60W

Dimension $(W \times D \times H)$ mm : $(220 \times 265 \times 385)$

Weight : 10.5 Kg

Standard supplies : Main unit, 230V cable, pack of 100 sample

cup,100 ml FlowClean, lint free cloth, pack of 25, fuse: 1 no., 10 ampoules (10x1ml) of calibration standards 300 and 850 mOsmol/kg.