

# Micro Osmometer MOD200 Plus

The Loser osmometer from Camlab is a high quality freezing point osmometer with a wide variety of applications. With a small footprint this simple to use osmometer is suitable for a whole range of uses from research to quality control on a production line. With a simple three point calibration the Loser osmometer has excellent linear response. All this is backed by Camlabs service and technical support with over 20 years of experience dealing with this product.

Osmometers are instruments for the determination of osmotic concentration of aqueous solutions. A small amount of aqueous solution (100µl or 50µl) is used to measure the freezing point. Based on this value the instrument calculates the osmotic concentration (or osmotic pressure) and displays it.

## Applications

### Human and Veterinary medicine:

- Osmolality measurement in urine, blood or serum samples (kidney function check)

### Biological research:

- Determination of osmolality in nutrient solutions for cell culturing and fixing for microscopic specimens
- Osmolality measurement from haemolymph samples (bodyfluid of insects)

### Botany:

- Determination of osmolality from plant saps and nutrient solutions

### Pharmaceutical Industry:

- Osmolality of pharmokinetic samples for urine, blood or serum
- Production checks on saline solutions

### QC applications:

- Contact lens fluid
- Pharmaceuticals
- Consumer healthcare
- Sports drinks



## Micro Osmometer MOD200 Plus

- Easy-to-use, menu-led operation
- Large LCD Display
- Uses standard 1.5ml micro tubes
- Sample volume 100µL
- 3 point calibration
- Wide linear range
- No water supply necessary
- Fast measuring time, only 1.5 minutes
- Integrated keyboard
- Barcode reader option



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## Operating Procedure

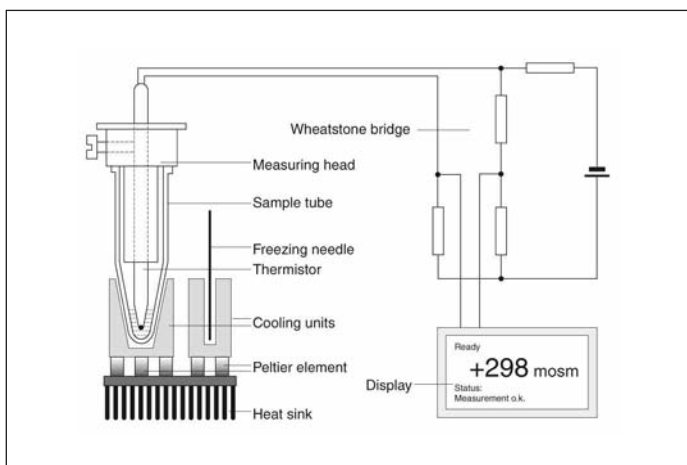
- Switch on (run-up time 3 minutes)
- Transfer 100µL of sample into the sample tube
- Attach the tube to the measuring head
- Slide the measuring head down, insert tube into the cooling cone
- Supercooling is reached in about 1 minute and shortly after the seeding needle is automatically inserted into the sample vessel
- The freezing point is determined and osmolarity is shown on the digital display. An audible signal indicates the measurement has been completed. The measurement value is stored in the memory.
- Raise the measuring head, remove sample tube and wipe thermistor with a soft tissue.

## Calibration

The sample volume may be 50µL or 100µL but calibration and measurement must always be carried out on the same volume. Zero is set using distilled water, and the instrument is calibrated against a 300mOsm/kg water standard (20 ampoules supplied.) Only occasional checks are necessary.

## SPECIFICATION

Range:	0 to 2500mOsm/kg
Reproducibility:	±0.5%
Measurement time:	1.5 minutes approx
Dimensions, mm	(WxHxD) 180 x 270 x 216
Weight:	6.3kg
Electrical:	230v AC, 45VA



## ORDERING INFORMATION

Reference	Description
MOD.200PLUS	Micro Osmometer Type 15
MOD.DR15	Printer, with cable
MOD.SC15	Bar code scanner
MOD.108	300 mOsm/kg calibration standard pack of 10
MOD.109	900 mOsm/kg calibration standard pack of 10
RTP/77120-N	Osmometer sample tubes, 1.5ml, pack of 500
MOD.S010008	Ribbon cassette for printer
MOD.S010009	Paper roll for printer
MOD.S010010	Power supply

Ensure accurate sample volumes with Socerex fixed volume pipettors.

Reference	Description
SX/815.0050	50 ul fixed volume pipette
SX/815.0100	100 ul fixed volume pipette
SX/308A	Pack of 1000 tips (1-200 ul)

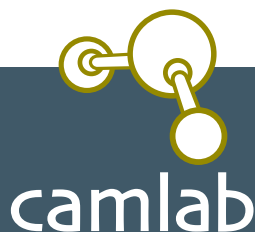
Camlab's own brand of 1.5ml tubes are ideal for use with the Micro Osmometer Type 15.

Reference	Description
RTP/77120-N	Osmometer sample tubes, 1.5ml, pack of 500

Sample organisation with Camlab multi purpose reversible racks designed to hold up to 96 tubes, supplied with or without covers.

Reference	Description
RTP/7110-96mx	Mixed pack of 5 racks
RTP/7110-96mxc	Mixed pack of 5 racks with covers

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Camlab Limited, Camlab House, Norman Way, Over, Cambridge, CB4 5WE  
 Tel: 01954 233110 • Fax: 01954 233101  
 email: mailbox@camlab.co.uk • www.camlab.co.uk