

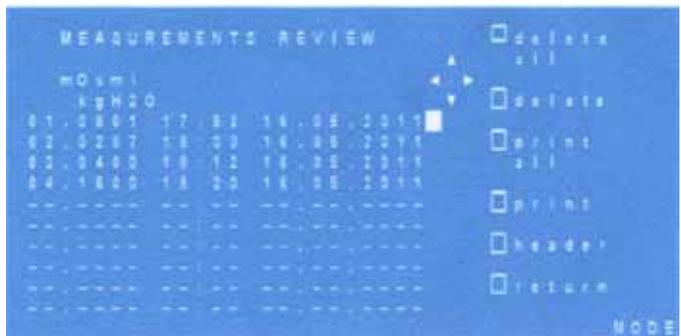
**OSM-9, Osmometer**

The OSM-9 is a compact micro processor controlled analyzer for easy and precise osmolality tests in samples of serum, plasma, urine or other body fluids.

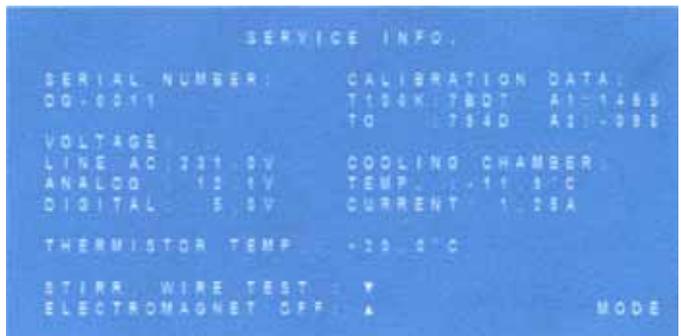
**OSM-9 model has hi-tech user interface:**

- Observation of the sample freezing process with immediate information regards result correctness.
- Available measurement results history with printout of the single result or of many chosen measurement results.
- Active result printout description.
- Service panel with service tests.
- Displaying in Polish/English/German/French.
- Date and time setting.
- The microprocessor control and built in electronic components with high long term stability make the OSM-9 an analyzer of easy application & reliable results.

- Whole blood, plasma or serum (Sosm):**
- Monitor hypo and hypernatremic states.
  - Monitor effectiveness of fluid therapy such as 5% dextrose solutions.
  - Detect and monitor over hydration and dehydration.
  - Diagnose and monitor diabetics, especially diabetichyperosmolal non-ketonic coma (DHNC).
  - Lactic-acid monitoring in shock-trauma patients.
  - Reaffirm BUN, glucose and electrolyte value.
- Urine:**
- Detection of the onset of acute renal disease.
  - Monitor antidiuretic hormone (ADH) activity.
  - Monitor effectiveness of diuretic therapy especially Mannitol.
  - Monitor polyuric states.
  - Detect diabetes insipidus.

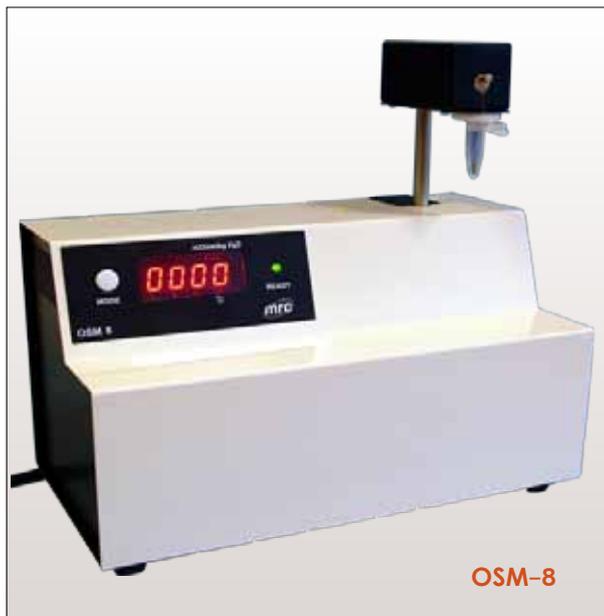


Simple operation: The OSM-9 makes the running of the osmolality test very easy. 100µl of the sample are pipette into a sample tube. The sample tube is attached to the measuring head. The measuring head is pushed down into the cooling chamber. Now the measuring cycle starts automatically. When the measuring is terminated, the measuring head returns to its upper position again, and the result is digitally displayed in mOsm/kgH<sub>2</sub>O.



- 1-point calibration - the 1-point-calibration requires distilled water only, and is one of the most practical features of this analyzer. The calibration values are automatically calculated and stored in the microprocessor memory.
- Automatic work - the OSM-9 needs only a sample.
- The microprocessor control and built in electronic components with high long term stability.
- Ready to work - ca. 5 min; short measuring time - 1.5 min
- High precision (± 0,5%) and reproducibility (better than 0.5%) results.
- Disposable tubes do not require clearing and sterilization.
- Low operating cost.

Model	OSM-9
<b>1-point calibration</b>	0 mOsm/kgH <sub>2</sub> O
<b>Cooling</b>	thermoelectric (Peltier effect)
<b>Sample volume</b>	100 µl
<b>Measuring range</b>	0-2000 mOsm/kgH <sub>2</sub> O
<b>Resolution</b>	1 mOsm/kgH <sub>2</sub> O
<b>Precision</b>	± 0.5%
<b>Reproducibility</b>	better than 0.5%
<b>Dimensions</b>	300x200x170mm
<b>weight</b>	6.25kg



OSM-8

### Whole blood, plasma or serum (Sosm):

- Monitor hypo and hypernatremic states.
- Monitor effectiveness of fluid therapy such as 5% dextrose solutions.
- Detect and monitor over hydration and dehydration.
- Diagnose and monitor diabetics, especially diabetichyperosmolal non-ketonic coma (DHNC).
- Lactic-acid monitoring in shock-trauma patients.
- Reaffirm BUN, glucose and electrolyte value.

### Urine:

- Detection of the onset of acute renal disease.
- Monitor antidiuretic hormone (ADH) activity.
- Monitor effectiveness of diuretic therapy especially Mannitol.
- Monitor polyuric states.
- Detect diabetes insipidus.

### OSM-8, Osmometer

The freezing-point microprocessor-controlled one-point calibration instrument featuring a fully automated measuring process determining the osmolality of body fluids such as urine, serum and other biological fluids.

Unique one point calibration using distilled water, saves time and expenses.

Automatic error identification and automatic function control are outstanding features of this instrument.

### Features:

- Easy sample handling in 1.5ml tubes.
- Bench space saving design.
- One-point-calibration.
- Automatic measuring procedure with error detection.
- The sample is cooled to below its freezing point by means of an air-cooled thermoelectric Peltier cascade.
- Series communication for printer RS232.
- The measuring result is displayed in digital form to four places in mOsm/kg H<sub>2</sub>O.
- Sample volume 100µl, measuring time 90 sec.
- Measuring range 0 to 2000 mOsm/kg H<sub>2</sub>O, standard deviation ±1%.

Model	OSM-8
sample volume	0.1 ml
measuring range	0-2000 mOsm/kgH <sub>2</sub> O
accuracy	±1 mOsm/kgH <sub>2</sub> O ±0.4%
precision	±1 mOsm/kgH <sub>2</sub> O ±0.4%
stability	2 mOsm/kg H <sub>2</sub> O/8h
measuring time	ca. 90s
dimensions	300x200x170mm
weight	6.25kg

The instrument is easy to be operate. After being placed into the measuring vessel the sample of biological fluid is pushed onto the thermistor. By pressing down the measuring head the fluid sample is introduced into the cooling section. The sample is than continuously cooled down (Peltier-effect) below its freezing point. At defined supercooling temperature the crystallization process is initiated by the stirrer. The liberated heat of crystallization causes rising the temperature of ice-liquid mixture.

The max temperature value depends on the sample osmolality. The temperature is detected and after calculations the result is displayed directly in mOsm/kgH<sub>2</sub>O.

### Accessories:

150-1-000010	Sample tubes 1box=1000pcs
150-1-000011	Standard Solution 400mOsm/KgH <sub>2</sub> O
150-1-000012	Standard Solution 800mOsm/KgH <sub>2</sub> O
150-1-000013	Standard Solution 1600mOsm/KgH <sub>2</sub> O
150-1-000014	Standard Solution 0mOsm/KgH <sub>2</sub> O