# SALINTEST HI98203 Salinity Concentration Pocket-sized Meter





# **GENERAL INFORMATION**

The **SALINTEST** utilizes a sodium ion-selective glass electrode to determine the activity of sodium ions in solution.

When dissolved, NaCl ionizes to form Na $^+$  and Cl $^\circ$  ions. Measurement of Na $^+$  ion concentration is an indicator of the concentration of NaCl.

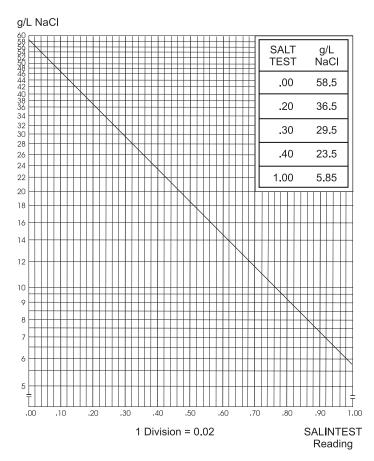
The relationship between the **SALINTEST** reading and the g/L NaCl scale is shown in the logaritmic chart below.

A double junction reference is used to ensure a highly stable reading.

If you suspect that the calibration has drifted, you can recalibrate the meter by using **HI7081** or a solution of known concentration (adjust the reading with the calibration trimmer).

#### HOW TO USE THE CHART

- Locate the pNa reading on the horizontal axis of the chart.
- $\bullet\,$  Move vertically upwards to intersect with the  $45^{o}$  line.
- Move horizontally and read the "g/L of NaCl" value.



#### **OPERATION**

- Remove the protective cap and turn **SALINTEST** on by sliding the ON/OFF switch located on the top of the meter.
- Immerse it into the solution to be tested without exceeding the maximum immersion level.
- Stir gently and wait for the reading to stabilize.
- Read the value on display and use the chart to convert the reading to g/L NaCl.
- After use, switch the meter off, rinse the electrode with water and replace the protective cap.
- Large differences in pNa readings (±0.1) could be due to a dry electrode or lack in calibration.
- To improve performance, immerse the meter in HI7081 solution for a few minutes, at least once a week.

# CALIBRATION

- Immerse the tester in the HI7081 (30 g/L NaCl) calibration solution, without exceeding the maximum immersion level.
- Allow the reading to stabilize and with the supplied screwdriver adjust the calibration trimmer on the meter side to read ".30".

Calibration is now complete.



## MAINTENANCE

In case of erroneous reading even after an accurate calibration, the reference junction can be contaminated or clogged.

Pull out 2 mm (1/8") of the cloth junction to renew the electrode reference (it is recommended to cut the cloth leaving always at least 2 mm -1/8" over the reference compartment) and re-calibrate the meter.



The cloth junction can be pulled out approximately 20 times. After that, the electrode should be replaced.

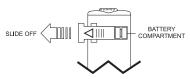
## ELECTRODE REPLACEMENT

For replacing the electrode, contact your local Hanna Instruments Office.

## BATTERY REPLACEMENT

If display fades or the **SALINTEST** switches off, the batteries must be replaced.

Slide off the battery compartment cover and replace all four 1.5V alkaline batteries while paying attention to the correct polarity.



Batteries should only be replaced in a non-hazardous area and using the battery type specified in this instruction manual.

# **SPECIFICATIONS**

Range	0.00 to 1.00 pNaCl (58.4 to 5.84 g/L NaCl)
Resolution	0.01 pNaCl
Accuracy (@20 °C/68 °F)	$\pm 0.02$ pNaCl
Typical EMC Deviation	$\pm$ 0.04 pNaCl
Calibration	Manual, 1 point
Environment	0 to 50 °C (32 to 122 °F) RH max 95%
Battery Type	1.5V alkaline (4 pcs.)
Battery Life	Approx. 500 hours of use
Dimensions	175 x 41 x 23 mm (6.9 x 1.6 x 0.9″)
Weight	95 g (3.4 oz.)

\*Readings outside the specified range are not valid.

## **ACCESSORIES**

HI7081L	30 g/L NaCl solution, 500 mL
HI7081M	30 g/L NaCl solution, 230 mL
HI7061M	Cleaning solution, 230 mL
HI73202	Spare electrode
HI731326	Calibration screwdriver (20 pcs.)

## WARRANTY

This meter is guaranteed for one year against defects in workmanship and materials when used for their intended purpose and maintained according to instructions. Probe is guaranteed for six months. This warranty is limited to repair or replacement free of charge. Damages due to accident, misuse, tampering or lack of prescribed maintenance are not covered. If service is required, contact your local Hanna Instruments Office. If under warranty, report the model number, date of purchase, serial number and the nature of the failure. If the repair is not covered by the warranty, you will be notified of the charges incurred. If the instrument is to be returned to Hanna Instruments, first obtain a Returned Goods Authorization Number from the Customer Service department and then send it with shipment costs prepaid. When shipping any instrument, make sure it is properly packaged for complete protection.

The SALINTEST is in compliance with the CE directives.