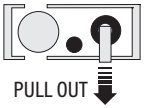
Care & Maintenance

- To improve accuracy, immerse the meter in **HI7081** solution for a few minutes at least once a week.
- Erroneous readings after accurate calibrations may indicate a contaminated or clogged junction. Pull out 2 mm (⅛") of the cloth junction to renew the electrode reference. Cut the cloth leaving at least 2 mm (⅛") over the reference compartment and recalibrate the meter.
  The cloth junction can be pulled out approximately 12 times.

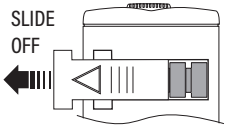


Battery Replacement

When the display fades or the meter switches off, the batteries need replacing.

To replace the batteries:

1. With the meter off, slide off the battery compartment cover.
2. Remove the old batteries.
3. Insert 4 new 1.5V Alkaline batteries in the battery compartment while paying attention to the correct polarity.
4. Replace the battery compartment cover.



Note: *Do not mix old and new Alkaline batteries. Only use specified battery type. Dispose of old batteries in accordance with local regulations.*

Accessories

HI7081L	30 g/L NaCl standard solution, 500 mL
HI7081M	30 g/L NaCl standard solution, 250 mL
HI7061M	General purpose cleaning solution, 230 mL
HI731326	Calibration screwdriver (20 pcs.)

Certification

All Hanna Instruments conform to the **CE European Directives.**

CE RoHS compliant

Disposal of Electrical & Electronic Equipment. The product should not be treated as household waste. Instead, hand it over to the appropriate collection point for the recycling of electrical and electronic equipment, which will conserve natural resources.

Disposal of waste batteries. This product contains batteries, do not dispose of them with other household waste. Hand it over to the appropriate collection point for recycling.

Ensuring proper product and battery disposal prevents potential negative consequences for the environment and human health. For more information, contact your city, your local household waste disposal service, or the place of purchase.

Recommendations for Users

Before using this meter, make sure that it is entirely suitable for your specific application and for the environment in which it is used. Avoid touching the electrode at all times. Any variation introduced by the user to the supplied equipment may degrade the meter's performance. For your and the meter's safety do not use or store the meter in hazardous environments.

Warranty

HI98203 is warranted for a period of one year against defects in workmanship and materials when used for its intended purpose and maintained according to instructions. This warranty is limited to repair or replacement free of charge. Damage due to accidents, misuse, tampering, or lack of prescribed maintenance is 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 problem. 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 office, first obtain a Returned Goods Authorization (RGA) number from the Technical Service department and then send it with shipping costs prepaid. When shipping any instrument, make sure it is properly packaged for complete protection.

Hanna Instruments reserves the right to modify the design, construction, or appearance of its products without advance notice.

IST98203 08/21

INSTRUCTION MANUAL

SALINTEST HI98203

Salinity Concentration Pocket-sized Meter

HANNA® instruments

Dear Customer,

Thank you for choosing a Hanna Instruments product. Please read this instruction manual carefully before using the meter. For more information about Hanna Instruments and our products, visit www.hannainst.com or e-mail us at sales@hannainst.com.
For technical support, contact your local Hanna Instruments office or e-mail us at tech@hannainst.com.

Preliminary Examination

Remove the meter and accessories from the packing material and examine it carefully. If you require any further information, please contact Hanna Instruments technical support team at tech@hannainst.com.
Each **HI98203** is supplied with:

- Protective cap
- Calibration screwdriver
- 1.5V Alkaline battery (4 pcs.)
- Quality certificate and Instruction manual

Note: *Save all packing material until you are sure that the meter works correctly. Any damaged or defective item must be returned in its original packing material with the supplied accessories.*

General Description & Intended Use

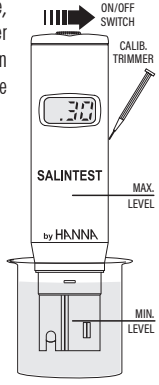
HI98203 is designed to help users monitor the concentration of sodium chloride in aquaculture applications and salt concentration in marine fish tanks and aquariums.
The meter has a one-point calibration through a trimmer on the side and is equipped with a sodium ion-selective glass electrode that determines the activity of sodium ions in solution. When dissolved, NaCl ionizes to form Na^+ and Cl^- ions. Measurement of Na^+ ion concentration is an indicator of the concentration of NaCl. The double junction reference ensures highly-stable readings.

Specifications

Range	0.00 to 1.00 pNaCl (58.4 to 5.84 g/L NaCl)
Resolution	0.01 pNaCl
Accuracy	±0.02 pNaCl (@ 20 °C / 68 °F)
Calibration	Manual, one point
Environment	0 to 50 °C (32 to 122 °F) RH max. 95%
Battery type	1.5V Alkaline
Battery life	Approximately 500 hours of continuous use
Dimensions	175 x 41 x 23 mm (6.9 x 1.6 x 0.9")
Weight	95 g (3.4 oz.)

Calibration

1. Remove the protective cap and slide the ON/OFF switch to turn the meter on.
2. Immerse the meter in **HI7081** 30 g/L NaCl calibration solution, paying attention not to exceed maximum immersion level. Allow the reading to stabilize.
3. When the reading is stable, use the supplied screwdriver to adjust the calibration trimmer on the side until the display shows ".30". Calibration is complete.



To avoid calibration drift, refer to Care & Maintenance section. A solution of known concentration can also be used to recalibrate the meter.

Measurement

1. Remove the protective cap.
2. Slide the ON/OFF switch to turn the meter on.
3. Immerse the meter into the solution to be tested, paying attention not to exceed maximum immersion level.
4. Stir gently and wait for the reading to stabilize.
5. Use the chart to convert read value to g/L of NaCl.
6. After use, switch the meter off, rinse the electrode with water, and replace the protective cap.

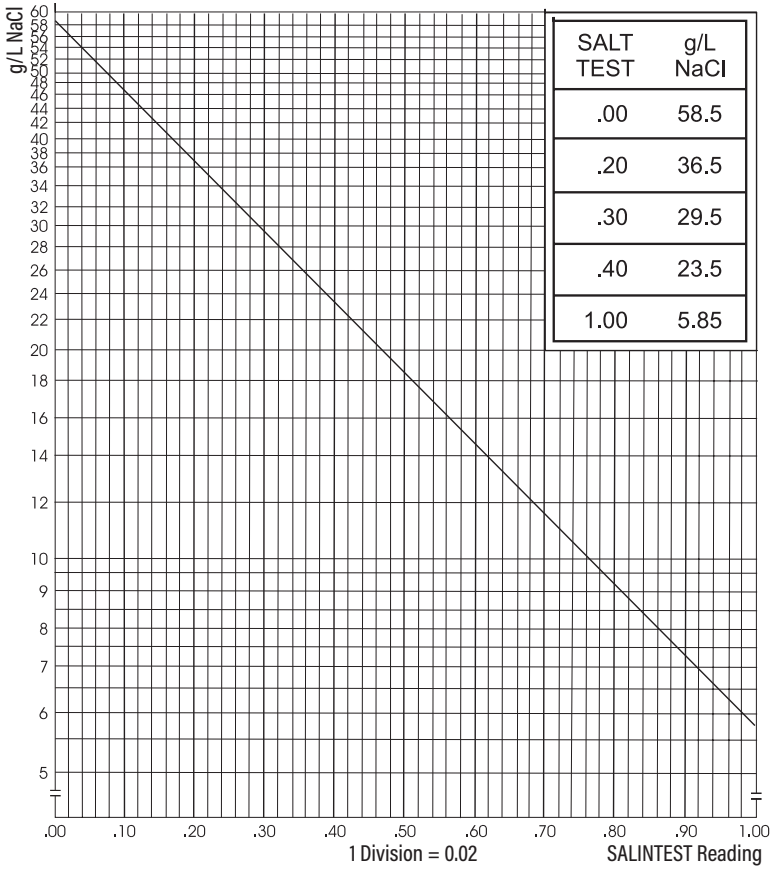
Note: *For accurate readings keep the electrode hydrated and calibrate frequently.*

How to Use the Chart

The logarithmic chart below converts readings into g/L of sodium chloride.

1. Locate the reading on the horizontal axis.
2. Move vertically upwards to intersect with the 45° line.
3. Move horizontally and read the g/L of NaCl value.

E.g. Read value = .42
converted g/L NaCl value = 22



SALT TEST	g/L NaCl
.00	58.5
.20	36.5
.30	29.5
.40	23.5
1.00	5.85