

## WHAT IS TDS?

Total Dissolved Solids (TDS) are the total amount of mobile charged ions, including minerals, salts or metals dissolved in a given volume of water. TDS, which is based on conductivity, is expressed in parts per million (ppm) or milligrams per liter (mg/L). TDS includes any conductive inorganic element present other than the pure water molecules (H<sub>2</sub>O) and suspended solids.

TDS affects everything that consumes, lives in or uses water, from fish and plants to plumbing and laboratories.

For people, the lower the TDS level in the water you drink, the more efficiently your body's cells are hydrated. The higher the TDS level in water, the greater the probability of harmful contaminants that can pose health risks or hinder the absorption of water.

The U.S. EPA's Maximum Contaminant Level of TDS for human consumption is 500 ppm.

## USE THE TDS-3 METER TO:

- Check the performance of your water filter.
- Be sure your drinking water is at the right TDS level.
- Measure TDS levels for other applications.

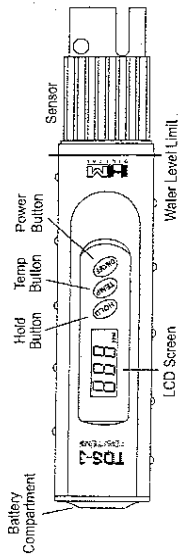
## FEATURES

- **Wide Range:** Accommodates most applications.
- **Auto Shut-Off:** Shuts off automatically after 10 minutes to conserve batteries.
- **Large Screen:** Easy to see and share.
- **Hold Function:** View the reading out of the water.
- **Thermometer:** Measures temperature
- **Carrying Case:** Protects your meter!

## SPECIFICATIONS

- **TDS Range:** 0-9990 ppm (mg/L)
- **Temp Range:** 0-80 °C
- **ATC:** Yes (0-80 °C)
- **Accuracy:** +/- 2%
- **Calibration:** Factory calibrated with NaCl 342 ppm; adjustable.
- **Power:** 2 x 1.5V button cell (357A)
- **Battery Life:** Approx. 1000 hours
- **Dimensions:** 15.5 x 3.1 x 2.3 cm (6.1x1.25x1 in.)
- **Weight:** 76.5 g (2.7 oz) (with case)

## USAGE INSTRUCTIONS



### Taking TDS Measurements

1. Remove the protective cap.
2. Turn the TDS meter on. The ON/OFF switch is located on the panel.
3. Immerse the meter into the water/solution up to the max. immersion level (2").
4. Lightly stir the meter to dislodge any air bubbles.
5. Wait until the display stabilizes. Once the reading stabilizes (approx. 10 seconds), press the HOLD button to view the reading out of the water.
6. If the meter displays a flashing "x10" symbol, multiply the reading by 10.
7. After usage, shake off any excess water from your meter. Replace the cap.

### Taking Temperature Measurements

1. Once the meter is on, the temperature function can be used at any time, in or out of liquid.
2. Press the TEMP button. The display will switch to temperature (in Celsius only).
3. To return to TDS mode, press the TEMP button.

### Changing the Batteries

1. Remove the battery compartment.
2. Install new batteries (model 357A or L1154). Be sure the batteries are properly aligned.
3. Replace the battery compartment. The meter will turn on automatically.

### Precautions

1. The meter is not water-tight. Do not dip the meter beyond the water level limit. The warranty will be voided if water enters the unit.
2. Do not store the meter in high temperatures or direct sunlight. Damage to the unit caused by user error or carelessness will void the warranty.
3. Do not attempt to open the housing or tinker with the electronics of the unit. Any unauthorized work on the unit will void the warranty.
4. Though durable, the TDS-3 is an electronic instrument and should be treated with proper care and maintenance.

### CALIBRATION

Your meter has been factory calibrated to a NaCl 342 ppm solution. For information on calibration, visit [www.hmdigital.com/calibration\\_maintenance.html](http://www.hmdigital.com/calibration_maintenance.html).

## TEMPERATURE CONVERSION CHART

C	F	C	F	C	F	C	F
1	33.8	21	69.8	41	105.8	61	141.8
2	35.6	22	71.6	42	107.6	62	143.6
3	37.4	23	73.4	43	109.4	63	145.4
4	39.2	24	75.2	44	111.2	64	147.2
5	41	25	77	45	113	65	149
6	42.8	26	78.8	46	114.8	66	150.8
7	44.6	27	80.6	47	116.6	67	152.6
8	46.4	28	82.4	48	118.4	68	154.4
9	48.2	29	84.2	49	120.2	69	156.2
10	50	30	86	50	122	70	158
11	51.8	31	87.8	51	123.8	71	159.8
12	53.6	32	89.6	52	125.6	72	161.6
13	55.4	33	91.4	53	127.4	73	163.4
14	57.2	34	93.2	54	129.2	74	165.2
15	59	35	95	55	131	75	167
16	60.8	36	96.8	56	132.8	76	168.8
17	62.6	37	98.6	57	134.6	77	170.6
18	64.4	38	100.4	58	136.4	78	172.4
19	66.2	39	102.2	59	138.2	79	174.2
20	68	40	104	60	140	80	176

### THREE YEAR WARRANTY

This product is warranted to the purchaser against material and workmanship for three (3) years from date of purchase.

#### What is covered:

Parts and labor, or replacement at the company's option. Transportation charges to the purchaser.

#### What is not covered:

Transportation charges to the company. Damages from abuse or improper maintenance (see operating instructions and precautions). Any other consequential damages, incidental damages or incidental expenses, including damages to property. Some states do not allow exclusive or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

#### How to obtain warranty performance:

Include with the product your name, address, phone number, description of problem, proof of date of purchase, company purchased from, and return to:

HM Digital, Inc.  
5819 Uplander Way  
Culver City, CA 90230, U.S.A.

#### Implied Warranties:

Any implied warranties, including implied warranties of merchantability and fitness for a particular purchase, are limited in duration to three (3) years from date of purchase. Some states do not allow limitation on an implied warranty length, so the above limitation may not apply to you.

To the extent any provision of this warranty is prohibited by law and cannot be preempted, it shall not be applicable. This warranty gives you specific legal rights and you may also have other rights, which vary from state to state.