

# **TDS METER**

- For easy on-site measurement of total dissolved solids
- Easy to use



### Product

The microprocessor TDS meter offers a rapid and accurate field test for determining the concentration of total dissolved solids in system and mains waters. The prime use for the TDS is to determine whether a system has been correctly flushed after a chemical clean. This is done by comparing the readings between mains water and system water samples.

Provided that a system is known to be treated with an inhibitor which gives high enough conductivity readings, it is possible to determine the concentration of inhibitor in a system. However, modern inhibitor formulations, such as Protector F1, are mainly organic and contain few inorganic salts, thus giving a conductivity not much higher than mains water. For measuring the concentration of these inhibitors, therefore, it is recommended that the Protector Test Kit is used.

### How to Use

- 1) Turn the test meter on with the ON/OFF button.
- 2) Remove the protection can and pull out the electrode. Adjust the length of the electrode as needed.
- 3) Rinse the electrode with clean water and wipe it dry. Immerse the electrode in the calibration solution 0.01N KCI. Stir gently and wait until the display stabilises.
- 4) Adjust the reading to 141 (1410μs/cm) for conductivity or 94 (940 ppm) for TDS at 25°C by tuning the trimmer located at the right side of the meter with a screwdriver
- 5) Rinse the electrode with clean water and wipe it dry. Dip the electrode into the sample solution to be measured. Stir gently and wait until a stable readying can be obtained.
- 6) Read the measure on the display. The reading should be multiplied by a factor of 10 for conductivity or TDS.
- 7) After measurement, rinse the electrode with clean water and replace the protection cap.

## **Application with Chemical Cleaning**

For checking whether a system is flushed after a chemical clean, carry out steps 1 to 5 with both system water and mains water and compare the results. The system can be regarded as being thoroughly flushed if the readings are within 10% of each other. Differences above 20% mean that significant cleaner residues have been left in the system.

#### Maintenance

The TDS is virtually maintenance free. Change a new battery when the power fails to turn on or the display fades. Calibration is not necessary when taking comparative readings but may be required for accurate concentration checks. For further details on calibration please contact Fernox Technical Services on 0330 100 7750