# 77pi.

#### **APPLICATIONS**

#### Water:

Test TDS levels to determine purity

Test the amount of salt in food, seafood, or processed foods

#### Health:

Monitor the amount of salt intake

#### Water Filtration:

Test for TDS to determine performance level of filtration systems

#### Pools & Spa

Monitor TDS levels to prevent maintenance problems

#### HVAC:

 Test condensate water in cooling tower and humidifier reservoir applications to prevent bacterial growth

• Test TDS levels in make-up water to prevent scale formation, corrosion, and embrittlement

 Reduce water and chemical consump tion in boilers and cooling towers

 Determine when to perform blowdown and add make-up water

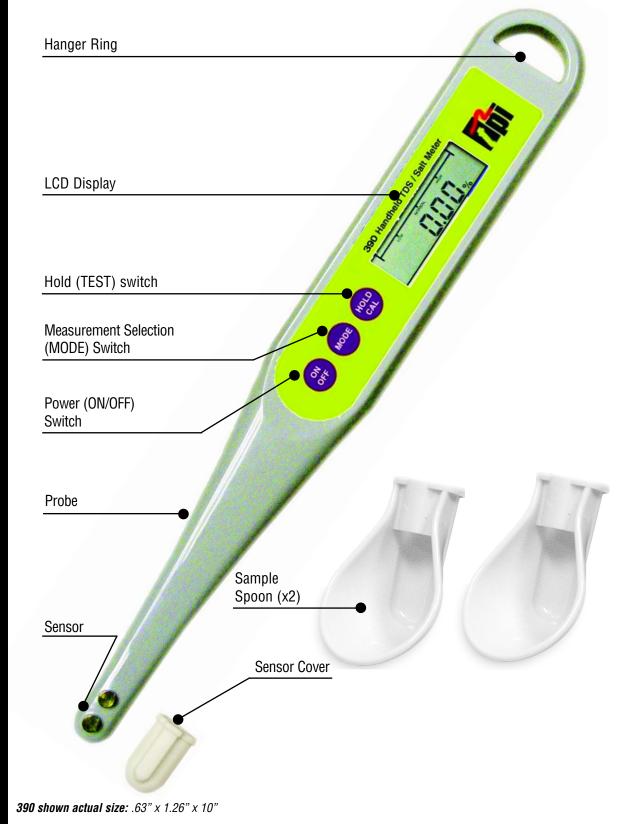
 Prevent contamina tion and corrosion of control valves, heat exchangers, and steam traps

• Verify automated TDS contollers are functioning properly

• Prevent low quality wet steam generation in boilers due to foaming caused by high TDS levels

### **Measure TDS (Total Dissolved Solid) and Salt Concentration**

390 TDS / Salt Meter





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## **390 Specifications**

Measurement Target	Aqueous Solution
Salt Measurement	Measurement Method: Electric Conductivity Measurement System Measurement range: 0.001% to 5.0% Measurement Temp: 50°F to 104°F (10°C to 40°C) Measurement Temp. Range: 32°F to 158°F (0°C to 70°C)
Temperature Measurment	Measurement Range: 32°F to 212°F (0°C to 100°C) Measurement Accuracy: ±1°C (temp. range: 0°C to 70°C) of reading
TDS	Measurement Range: 0 to 999ppm (mg/L) Measurement Accuracy: ±3% full scale @ 20°C Excellent Temp. Range: 50°F to 86°F (10°C to 70°C) Measurement Temp. Range: 32°F to 104°F (0°C to 40°C)
Resolution @ 20°C	Salt Measurement: 0.01% to 0.1% TDS: 1ppm (mg/L)
Power Supply	LR44 or LR1154 Button Battery (x3)
Size	16.4mm x 32mm x 255mm
Standard Accessories	Sensor protection cap, supporting spoon (2), NaCl standard solution (40g), manual, and batteries

#### **Distributed By:**



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#### Why is controlling TDS levels important in HVAC applications?

High TDS levels in HVAC equipment cause corrosion, loss of efficiency, and premature failure.

## What is the advantage of testing TDS in boiler applications?

By monitoring TDS levels in HVAC equipment, a proper blowdown schedule can be implemented to prevent premature failure and lower operating costs.

## Why test drinking water for TDS?

The EPA advises the maximum contamination level (MCL) is 500ppm for TDS. TDS levels in excess of 1000ppm are generally considered unfit for human consumption. High levels of TDS warrant further

investigation, as the cause may be toxic ions such as arsenic, cadmium, and nitrate.

### How can TDS levels be reduced?

In drinking water, common ways to reduce TDS levels are, carbon water filters, reverse osmosis, and distillation.

## What are acceptable levels of TDS in drinking water?

<u>0 to 50ppm</u>- Ideal drinking water usually attained through reverse osmosis, deionization, micro filtration, and distillation.

<u>50 to 140ppm</u> - Considered an acceptable level for carbon filtering.

<u>140 to 400ppm</u> - Average tap water

<u>170ppm and above</u> - Hard water <u>500ppm</u>- EPA maximum contamination level.