



Wall Mounted TDS Controller with Proportional Function for Hydroponics and Fertigation

This wall mounted meter controls TDS in the 0 to 1999 ppm (mg/L) range through a single setpoint for dosage of fertilizers. The proportional control can be fine tuned through the time cycle between 0 to 90 seconds and the proportional band from 0 to 400 ppm. Coarse and fine as well as a slope trimmer make for an accurate setting and calibration. A pump or electro-valve can be powered through the terminal. In addition to the setpoint relay, HI 9934 also provides for an alarm relay. The alarm is activated when the measurements exceed the setpoint by a user-selectable margin in the 50 to 450 ppm range. The alarm also goes off if due to a malfunction, the continuous dosing time exceeds the operator adjustable period of 1 to 10 minutes. The alarm can be configured in either normally-closed or normally-open position and turned off during maintenance.

HI 9934 also provides an isolated output signal which is user selectable between 0-20 or 4-20 mA.

HANNA instruments® 4-ring TDS probes with incorporated temperature sensor and DIN connector can be quickly attached to the controller. Readings are automatically compensated for temperature variations in the 0 to 50°C (32 to 122°F) range.

The extractable terminal wiring is through the side of the meter with washers and grommets.

The compartment containing the connections is closed behind a fire-retardant ABS panel.



Specifications

	HI 9934
Range	0 to 1999 ppm (mg/L)
Resolution	1 ppm (mg/L)
Accuracy (@20°C/68°F)	±2% F.S.
Calibration	manual, 2 point, with zero and slope trimmers on the front panel
Setpoint	selectable from 0 to 1999 ppm (mg/L)
TDS Conversion factor	0.65 ppm = 1 µS/cm
Temperature Compensation	automatic, 0 to 50°C (32 to 122°F) with $\beta = 2\%/^{\circ}\text{C}$
Recorder Output	selectable at 0-20 mA or 4-20 mA (isolated)
Proportional Control	adjustable from 0 to 400 ppm, time cycle from 0 to 90 seconds
Dosing Contact	1 powered terminal for TDS correction (240 V, Max. 2A, 1,000,000 strokes) activated when reading < setpoint
Alarm Relay	1, activated when TDS exceeds the setpoint more than a selectable value (50 to 450 ppm) or when max dosage time (adjustable from 1 to 10 minutes) elapses (isolated, Max 2A-240 V, resistive load, 1,000,000 strokes)
Power Supply	110/115 Vac ±10% or 220/240 Vac ±10%; 50/60 Hz
Environment	-10 to 50°C (14 to 122°F); RH max 95% non-condensing
Dimensions	221 x 181 x 86 mm (8.7 x 7.1 x 3.4")
Weight	1.6 kg (3.5 lb.)

Accessories

HI 70442L	1500 ppm calibration solution, 500 mL bottle
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Ordering Information

HI 9934 is supplied complete with instructions.

1 = 115 Vac power supply
2 = 230 Vac power supply

HI 9934 -

For a complete range of process electrodes and probes, see section T2.
For a complete range of calibration, cleaning and maintenance solutions, see section F.