

5500 SALINITY BRIDGE

Measuring of TSD's in field pore water, the first In-Situ sensors for salinity

As water becomes more precious and salts intrude former productive fields, it is more important than ever to be able to measure migrating salinity in the pore waters over time. Only In-Situ 5000 Salinity Sensors and our 5500 Salinity Bridge allow you to measure these effects. The Model 5500 Salinity Bridge provides a means of measuring salinity (TDS) on-site, under ground and at a 25 0 C. The efficiency of use in both field and in laboratory setups, makes it the perfect tool in monitoring salinity movements and accumulations. All aluminum case, precision readout dials and associated potentiometers assure accurate salinity readings either in ohms or in mmho values. Reads out directly in mmho/cm corrected to 25 C (77 F) using 1KHz AC signal. Provides measurement of conductivity in the range of 2-40 mmho/cm. 3 Ohm scale ranges available 0-1K, 0-10K and 0-100K . Battery powered by 4ea. 9V batteries that will take 1000's of readings. Works with 5000L series sensors.

SPECIFICATIONS:

5500 SALINITY BRIDGE, comes complete in carrying case, manual and batteries included. 14" L X 14" W X 10" H (35.56 cm L X 35.56 cm W X 25.4 cm H), Weight 10 lbs. (4.53 kgs)



5000L IN-SITU SALINITY SENSOR

The salinity sensor that measures "in place" subsurface pore water salinity content

If you need to monitor the progression of salt build up in soil profiles, or need to see the effects of "leaching" sequences, the 5000L Series can do that at specific points in the profile. Only the 5000L sensors give discrete point evaluations of In-Situ total dissolved salt contents in the pore waters. Fabricated from proprietary 15 bar porous ceramics the pore water is measured through the full range of plant growth and remains "saturated" with ambient pore waters from saturated 0 to 1500 kpa Bar matric suction environments. Constructed of durable acrylic housing and epoxied for years of subsurface use the spring loaded head provides assurances that the sensor is in contact with the soil when deployed. It comes in various lengths, and is used with the 5500 Salinity Bridge shown above.

SPECIFICATIONS:

5000L04 IN-SITU SALINITY SENSOR, 4 ft (1.22 m) long, complete, spring loaded type.
5000L10 IN-SITU SALINITY SENSOR, 10ft.(3.05 m) long, complete, spring loaded type.
5000L25 IN-SITU SALINITY SENSOR, 25ft (7.62 m) long, complete, spring loaded type.



5510KL1 EC-PROBE

Collect estimates of in situ electrical conductivity

Salinization means an increased salt concentration of the soil. The occurrence of salt in rooted soil impedes the water absorption of plants, creating higher osmotic suctions and plant stresses. This in turn leads to a decrease in crop production. Using the 5510KL1 EC-probe and the earth resistivity meter for measurements of the electric conductivity in moist soils proves to be a quick, easy and relatively cheap method to determine the salt content of the soil. The set is particularly suitable for use in irrigation projects and eco-hydrologic research. The soil salinity / conductivity kit (probe and meter) are sufficient to monitor to a 100 cm (3 feet) depth with the direct push – type probe. 5510 has 3 resistive scales 0-19.9ohms, 20-199.9 ohms, and 200-1900 ohms with 2% accuracy and a response time of 4-8 seconds. The 6 AA size batteries power the unit for up to 1800 readings. Use the supplied gouge auger to pre-core the hole for easy insertion. All measurements are in terms of soil resistivity and then converted to electrical conductivity.

SPECIFICATIONS

5510KL1 EC-PROBE 1m depth, complete with probe, carrying case and auger. 46" L X 11" W X 9" H (117 cm L X 27 cm W X 23 cm H)
Weight 15.44 lbs. (7.00 kgs)

