

IRROMETER THE ORIGINAL NAME IN SOIL WATER MEASUREMENT

“ For over 70 years, IRROMETER products have been the preferred choice of growers and researchers who require accurate field data to efficiently schedule irrigation. We provide simple, affordable, and reliable solutions for improved yields, increased profits, and conservation of resources. ”

MEASURING SOIL WATER

Efficient irrigation improves yields, promotes plant health, and conserves resources.

Soil moisture sensors provide visibility into the root zone, allowing managers to make informed decisions about when and how much to irrigate. While there are many different methods available for estimating irrigation demand, sensors allow for actually measuring it.

Soil water measurement falls into two broad categories:

Volumetric measurement- measuring the percentage of water by volume in a given amount of soil.

Tensiometric measurement- measuring the physical force holding water in the soil, measured in Centibars (or kPa) of soil water tension.

IRROMETER soil moisture measurement is based on the tensiometric method, as the amount of water is less important than how difficult it is for the plant to extract it from the soil. Soil water tension (or matric potential) has to be overcome for the plant to move water into its root system. Different soil types will have different tensions, even at the same volumetric measurement, making volumetric information relative to local conditions and often requiring site calibration for reading equipment. Because we use soil water tension, there is no site calibration required when using our sensors.

Due to the fact that tensiometers have been used in research since the 1920's and have been commercially available from us since 1951, decades of published research by numerous universities and extension agencies have produced a wide field of reference for recommended tension levels to use with common crops and landscapes.