

Watermark Sensors



Watermark
Soil Moisture Sensor

The Watermark is a resistance type granular matrix sensor. The resistance across a pair of electrodes imbedded within the granular matrix varies with moisture content. This varied resistance is calibrated against known values and reported as soil water tension, the same value we obtain from an Irrrometer tensiometer reading. Internally installed gypsum is used as a buffering agent to compensate for the effects of varying salinity levels typically found in the irrigated agriculture environment. Watermark sensors can be read by several different devices.



Watermark Electronic
Meter (30-KTCD-NL)

The Watermark Meter is a solid state alternating current resistance bridge meter for reading Watermark Sensors. It is adjustable for soil temperature variations. One meter is required to read an unlimited number of sensors, one at a time. The Meter includes: touch pad operating panel, durable case and field changeable cable assembly. Read from 0 cb (WET) to 199 cb (Very Dry). Many Data Loggers can also read the Watermark Sensor, call Irrrometer for specific information.



Watermark Electronic
Module (WEM)

The Watermark Electronic Module (WEM) uses two Watermark sensors placed at varying depths within the root zone. The total tension is measured and averaged to report the overall condition within the root zone. This device typically works in conjunction with a standard 24 VAC irrigation controller. The WEM is in effect a switch which interrupts the common ground connection between the control valves and the controller. The irrigation scheduler selects the appropriate moisture level on the dial of the WEM, and the controller is allowed to only run the irrigation cycles necessary. Truly "automatic" scheduling is provided.

Monitors or dataloggers are devices which measure and record soil moisture readings over time. The data can then be collected and transferred to a computer system for storage and graphical analysis. Watermark sensors can be read directly or indirectly by many monitors on the market today. Please contact us for more details.