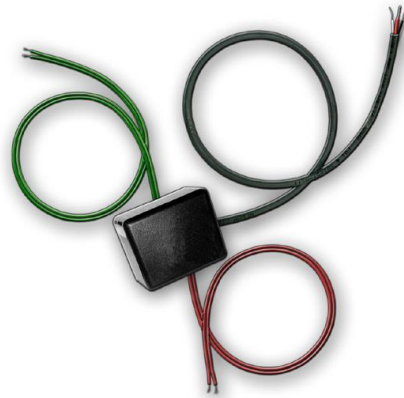


WATERMARK SS200 + ADAPTER



Compatible with LR-MS
With adapter 220SS-VA.
Precise reading

DESCRIPTION

The sensor WATERMARK is a resistive device that responds to changes in soil moisture. Once planted in the ground, it exchanges water with the surrounding soil, thus remaining in balance with it. Soil water is an electrical conductor thus providing a relative indication of the soil moisture state.

When the soil dries, water is removed from the sensor and the resistance measurement increases. At the opposite, when the soil is rewetted, the resistance decreases.

However, the reaction time to changes in soil moisture is slower than with a tensiometer or volumetric probe. Interpretation of the data is easy since the measurement result is given in centibar (water potential) valid for all soils.

The Watermark probe can be used on any type of crop to control irrigation

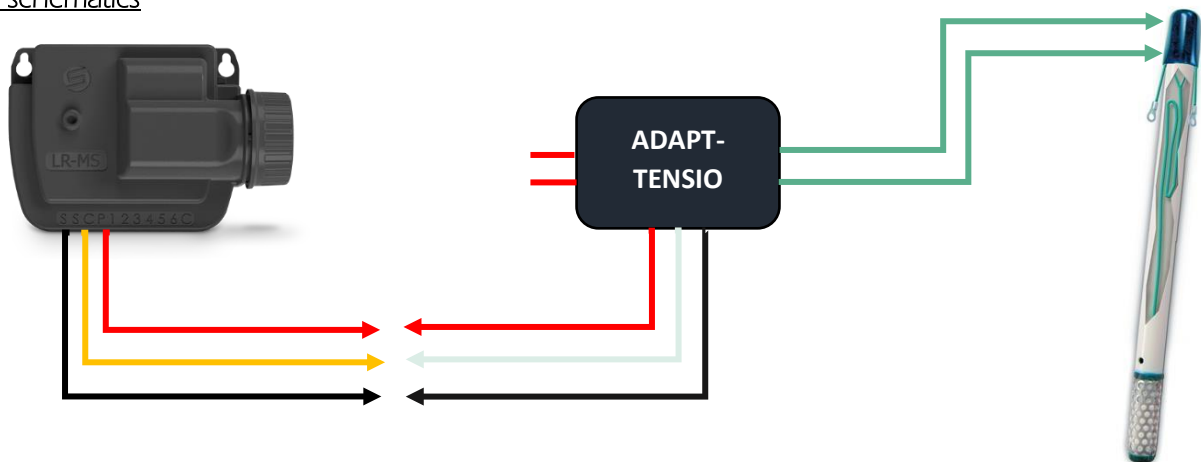
- To avoid excess water and the risk of crop suffocation
- To have crops of better quality and good conservation.
- To limit the leaching of fertilizers by excess irrigation.
- To reduce costs

The adapter will transform the value in centibar interpreted by the probe into a voltage value necessary for the LR-MS to retrieve the information and transmit it to MySOLEM.com via the gateway LR-MB (Wi-Fi) or LR-BST (3G).

This electronic adapter provides a linear voltage output which makes the WATERMARK Sensor very easy to read by most data loggers or devices. The voltage of the output signal is directly proportional to the soil water. This measurement of voltage represents the energy of a plant root used to draw water from the soil.

In use since 1978, the patented WATERMARK sensor is a solid-state electrical resistance detection. The sensor consists of a pair of highly corrosive resistant electrodes that are embedded in a granular matrix. As the soil water tension changes with the water content, the resistance also changes. The sensor adapter translates the resistance value into a linear voltage output.

Cable schematics



CARACTERISTICS

WATERMARK SS200 sensor	
UNIT OF MEASUREMENT	Centibar (=kPa)
RANGE OF MEASUREMENT	0 to 200 Centibar (of water potential)
TUBE LENGTH	60 cm
CABLE LENGTH	3 Meters
SOLEM PART NUMBER	SOND-TENSIO
ADAPTATER SS200 VA	
MATERIALS	Resin electronic card and in a plastic case
SOLAR PANEL FRAME	Anodized Alu
FRAME DIMENSION (2 models)	3,8 cm x 3,2 cm x 2 cm
WEIGHT	79,4 g
CABLE	AWG22 3 conductor cable outlet (46cm). AW20 2 conductor cable outlet (46 cm).
ALIMENTATION	3,2 à 30 V
OUTPUT VOLTAGE	From 0 to 2,8 Volts for 0 to 239 cb (kPa)
SOLEM PART NUMBER	ADAPT-TENSIO
WATERMARK SS200 sensor + ADAPTER SS200 VA	
SOLEM PART NUMBER	KIT-TENSIO