

WATERMARK SOIL MOISTURE SENSOR SMS009

The soil moisture sensor SMS009 is a gypsum block sensor measuring soil tension rather than water content. This way the sensor simulates the plants access to the available water in the soil. Soil moisture tension is a measure of the energy a plant must apply to the soil in order to extract the available moisture. The unit of measure is kPa (kilo pascals). The higher the measure, the harder the plant must work to extract the moisture.

To avoid polarisation the SMS009 is excited by ac sinusoidal ac voltage. A variety of APCS modules can be built for SMS009 input



Typical Applications

- Watering on/off control using LLD207 and QAU775
- Soil moisture profile monitoring and control using SI239 and DI739

Specification

Range: 10-200kPa.
Cable length: 1.5 meters.
Body dimensions: 20mm x 85mm

Installation

1. Soak sensor overnight always install a wet sensor.
2. A snug fit between the sensor and the soil is very important, use an auger to create a hole of desired depth and locate one sensor per hole.
3. Back fill with a mixture of Bentonite and sand.
4. An alternate method is to attach the sensor to a 19mm electrical conduit so that the sensor can be moved at the end of the season.
5. Mark or flag sensor locations.

