

Smart Irrigation From the Ground Up

(800) 272-7472 www.tucor.com

ECIFICATIONS

Soil Moisture Monitoring

Soil Moisture Monitoring maintains Tucor's lead at the forefront of the water conservation and plant health movement. By using sensors embedded in the soil root zone, Tucor controllers are able to continuously monitor the soil for the proper amount of moisture, specific to your particular location and your plants' needs. Installed along with any of our various ET devices, Tucor's Cycle Manager software will ensure that your soil both *starts* and *remains* at the proper moisture content, even as the ET feedback adjusts your irrigation around that optimal level.

Tucor's Soil Moisture Monitoring devices come in two styles:

- The Sensor, which measures one moisture level within the soil.
- The Probe, which incorporates multiple sensors within one housing for a range of measurements in a depth of soil.

Whichever method you use, Soil Moisture Monitoring will ensure that Tucor controllers will economically deliver just the water your plants need to stay healthy and green.

SMS Sensor (SMS-100):

The SMS-100 is a single-sensor design. Buried within the root zone, the SMS-100 will continuously monitor the moisture content and provide feedback to the Tucor controller.

Compensation factors are included for a range of soil types.

Cable length: 13', extendable to 2000'. Operating temperature: 23°F – 122°F Dimensions (approx.): 7" x 0.6" x 2.75"



SMP Probes (SMP-12, -20, -40, -60):

The SMP Probes come in four lengths for use in different environments. Probe lengths are 12", 20", 40", and 60". Each probe contains multiple sensors. Using multiple sensors within the probe permits the measurement of moisture levels within a depth of soil.

The number of sensors within the probe and spacing between sensors is:

- -12: 6, 2"
- -20: 5, 4"
- -40: 10, 4"
- -60: 15, 4"

Cable length: 13', extendable to 2000' Operating temperature: 23°F – 122°F

Operations and features:

 All sensors within each probe can be monitored and the moisture levels and soil temperatures recorded. Results are displayed in a color-coded spreadsheet for quick analysis. Email alarms may be sent under certain fault conditions.*





^{*} Data monitoring, recording, and alarming requires a RealNet subscription.

- One sensor per device (SMP or SMS), selectable by the user, can be used as the reference point to interrupt irrigation.
- Each device can be assigned to interrupt one or more Programs.
- Up to 10 devices may be connected to the controller.
- Up to 150 sensors can be monitored (e.g., ten SMP-60's, each with 15 sensors).
- One SMI-232 interface board is required for each controller.
- The extension cable must be approved Tucor cable.

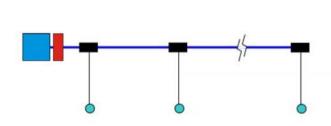
- All devices must be connected to a single extension cable. The maximum distance from controller is 2000'. The maximum distance of the device from the extension cable is 13'.
- A RealNet subscription is required to enable data monitoring. All other features may be programmed at the controller.
- Moisture Sensors may not be used in conjunction with an RKD-RFA-200 remote control.
- Connections from the probes to the TW-18/4MS wire are to be made with standard DBYs in a valve box (4 per connection).

Application:

RKD and RKS controllers.

Ordering Configuration:

Part Number	Item	Dimension	Embedded Sensors	Sensor Spacing
SMS-100	Sensor	7" x 0.6" x 2.75"	1	-
SMP-12	Probe	12"	6	2"
SMP-20	Probe	20"	5	4"
SMP-40	Probe	40"	10	4"
SMP-60	Probe	60"	15	4"
SMI-232	Interface	-	-	-
TW-18/4MS	Wire	-	-	-



Symbol	Name		
	Tucor Controller		
	Soil Moisture Sensor or Probe with 13' cable		
	Waterproof connection		
	TW-18/4MS wire		
	SMI-232 Interface		