

SMRT-Y Soil Moisture Sensor Kit

Accurate • Reliable • Smart

The Rain Bird SMRT-Y Soil Moisture Sensor kit adds closed-loop feedback to irrigation systems, conserving water through on-off system control based on digital measurement of the soil's volumetric water content. The sensor takes soil moisture readings every 10 minutes. When the sensor detects dry conditions prior to the normal watering cycle, that cycle is allowed. When the soil is above the set moisture threshold, the watering cycle is suspended to avoid wasting water.

Key Benefits

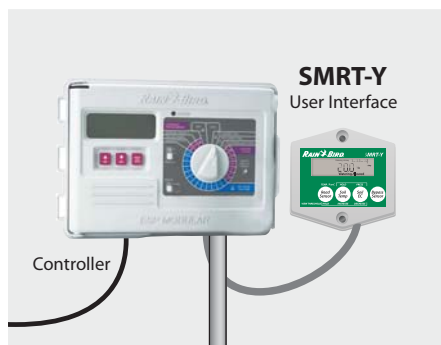
- Turns any controller into a smart controller
- Typical water savings of 40% or more
- Simple, reliable design with two main components (sold as kit):
 - In-Ground Soil Moisture Sensor
 - Sensor Control User Interface
- Digital TDT™ sensor enables highly accurate readings that are independent of soil temperature and electrical conductivity (EC)
- Displays soil moisture content as well as soil temperature and EC

Digital TDT™ Soil Moisture Sensor

- Sensor uses Time Domain Transmissometry (TDT) and digital signal processing to measure soil moisture content accurately and consistently
- Corrosion-resistant in-ground sensor made of high-grade 304 stainless steel
- No maintenance sensor – just bury and forget
- Reads absolute – rather than relative – Volumetric Water Content (0-100%)
- Precisely measures soil temperature and electrical conductivity (EC)
- Moisture readings remain stable as soil salinity and temperature change
- Sensor never needs calibration

User Interface with LCD Readout

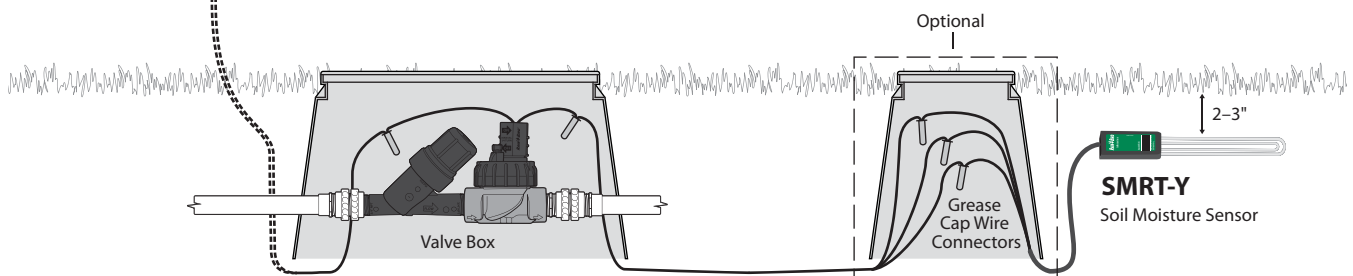
- Touchpad keys with digital LCD readout to display:
 - Absolute Volumetric Water Content, 0-100%
 - Soil temperature in Fahrenheit or Celsius
 - Soil conductivity in dS/m
 - Seven-cycle irrigation history
 - Suspended/allowed watering indicator
 - Bypass mode indicator
- Automatic moisture threshold setting with increase/decrease adjustment
- Sensor bypass touchpad key for easy deactivation
- Up to two independent zones can be isolated from sensor
- Designed for outdoor installation



How To Specify

SMRT-Y

Model
SMRT-Y Soil Moisture Sensor Kit



Operating Specifications

- 25 Volts AC at 12W
- Operating temperature range: -4°F to 158°F (-20°C to 70°C)
- Survival temperature range: -40°F to 185°F (-40°C to 85°C)

Dimensions

Sensor Control

- Overall Width: 3.0" (76mm)
- Overall Height: 3.0" (76mm)
- Overall Depth: 0.75" (19mm)

In-Ground Soil Moisture Sensor

(without wires)

- Overall Width: 2.0" (50mm)
- Overall Length: 8.0" (200mm)
- Overall Depth: 0.5" (12mm)

Complete SMRT-Y Kit

Includes

- Controller User Interface
- In-Ground Soil Moisture Sensor
- Anodized, rust-proof screws, 1.5" (two per package)
- Wire nuts – 5 blue, 2 gray, 1 yellow
- Multilingual instruction manual, "Quick Start" Guide and sticker that reads: "This controller is connected to a Rain Bird Soil Moisture Sensor"

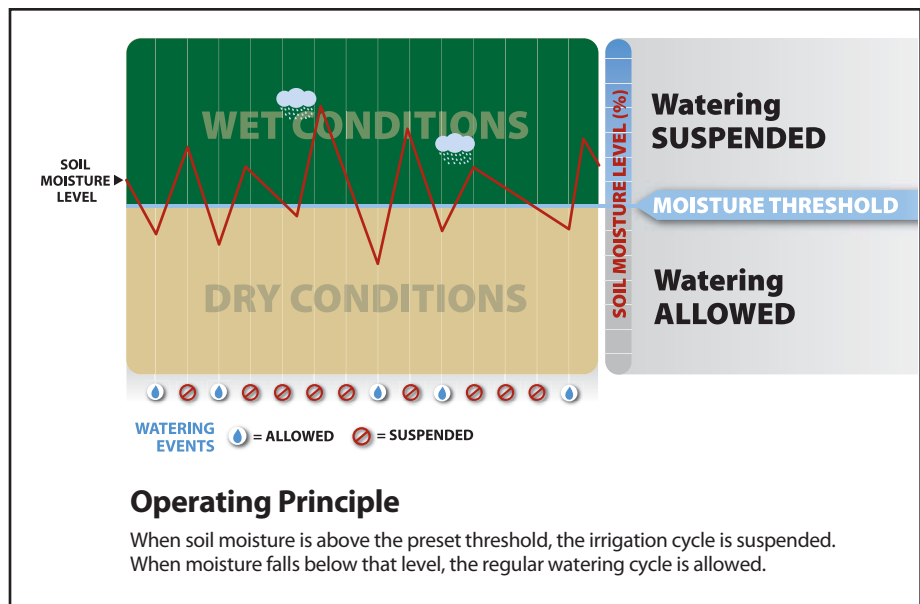
Technical Specifications

The SMRT-Y Soil Moisture Sensor shall be a smart watering control device for use with a standard 24-Volt AC irrigation controller. It shall take digital readings every 10 minutes of soil Volumetric Water Content (VWC) utilizing Digital Time Domain Transmissometry (TDT) signal processing that delivers accurate readings independent of soil temperature and electrical conductivity.

It shall consist of a 304 stainless steel digital Soil Moisture Sensor and a User Interface. In operation, the SMRT-Y Soil Moisture Sensor shall only allow a programmed watering cycle when the soil moisture drops below a set moisture threshold. When the moisture

is above that threshold, the SMRT-Y Soil Moisture Sensor shall suspend the normal watering cycle by interrupting the common line to the valve solenoids.

Features shall include automatic setting of soil moisture threshold with increase/decrease adjustment as well as bypass mode. User interface shall enable instant readings of soil moisture, temperature and electrical conductivity plus review of 7-cycle watering history. The SMRT-Y Soil Moisture Sensor shall be sold by Rain Bird Corporation.



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The Intelligent Use of Water™
www.rainbird.com