

Sentek Drill & Drop: Encapsulated Soil Moisture, Salinity, and Temperature Probe



# Fully Encapsulated Probe

Water content profile with quick and easy installation

#### Overview

The Sentek Drill & Drop is a fully encapsulated, easy to install soil measurement probe. The Drill & Drop consists of multiple sensors to measure soil moisture, salinity, and temperature at intervals of 10 cm (4 in) along the length of the probe.

The Drill & Drop probe is ideal for measuring soil moisture, salinity, and temperature in the crop's root zone, which optimizes irrigation efficiency. The probe is available in 3 lengths to tailor the probe to a specific root depth. Due to its ease of installation, the probe is also well-suited to seasonal applications and situations where the probes may need to be moved during the monitoring season.

The Sentek Drill & Drop is useful for:

- Improving crop water use efficiency
- Increasing crop yield

- > Crop water savings
- > Vineyard moisture monitoring
- > Fertilizer management
- > Irrigation management

### **Irrigation Management**

The Drill & Drop soil moisture probe is well suited for irrigation management applications. By measuring the moisture profile, and comparing the root zone to the depth of moisture in the soil, the user can make decisions about how much irrigation to apply, and when it is necessary. This optimizes the irrigation application which both increases crop yield, and minimizes cost of unnecessary irrigation. When used for irrigation management, the probe can quickly pay for itself in water savings and increased yield.

#### **Benefits and Features**

- > Tapered shape for undisturbed installation
- Option to measure soil moisture and temperature or soil moisture, temperature, and salinity at 10 cm intervals
- > Well-suited for short term or seasonal applications
- Pre-normalized sensors with a built in default calibration equation

## **Detailed Description**

Each soil moisture sensor outputs an SDI-12 signal that our CR200(X)-series, CR800, CR850, CR1000, CR3000, and CR6

dataloggers can measure. This allows the probes to be integrated with a Campbell Scientific datalogger or weather



station. Integrating the probes into our data acquisition systems allows the data to be telemetered back to a field station or remote computer.