



# drill & drop

water, temperature & EC profile probes

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## overview

- Low cost, easy to install and maintain soil moisture probes
- Measures volumetric soil water content, temperature and (optional) salinity
- Connect to our data loggers or we assist you in connecting to your data logger
- Option for wireless and telemetry via LoRa WAN and modems
- Installation training and on-going assistance with data analysis



The Drill & Drop is a fully encapsulated, easy to install, soil measurement probe. Probes are available in five lengths, (10cm, 30cm, 60cm, 90cm and 120cm), with sensors fixed at every 10cm increment. Purchase options are either length with soil moisture + temperature sensors or soil moisture + temperature + salinity.

Due to the ease of install and protected electronics, the Drill & Drop is ideally suited to situations where a monitoring probe may need to be moved between sites in short term and annual crops. Having the electronics completely encapsulated and able to be completely buried also makes the probe suited to long term installations, where machinery will pass often, such as dry land and feed crops. Being able to leave the probe in the ground means long term, uninterrupted data trends and comparison between seasons is possible.

The Drill & Drop also covers the issue of data continuity and integrity where the probe does need to be reinstalled. The ingenious tapered probe and matching auger allows direct, slurry-free, installation. This direct installation method means that the probe is measuring 'real' representative soil conditions immediately after install, because the surrounding soil has not been disturbed.

## features



- Four probe length options – 30cm, 60cm, 90cm and 120cm
- Option to measure soil moisture & temperature or moisture & temperature & salinity at every 10cm interval
- Extremely fast and easy Undisturbed Installation due to tapered shape
- Measures the true soil profile, NOT slurry
- Stable potting material
- Able to be buried to any depth
- Sentek-proven quality soil moisture and salinity measurements
- Sentek-designed and owned integrated chip technology
- Soil temperature resolution 0.3%
- Pre-normalised sensors with inbuilt default calibration equation
- Outputs: SDI-12 or RS-485
- Available as SOLO, PLUS, MULTI, Modbus and SDI-12

## whole system monitoring solutions



Edaphic Scientific is a one-stop shop for a whole system monitoring solution. We provide plant and soil monitoring systems for researchers and growers including wireless, LoRa WAN.

Our systems not only support dendrometers, but related sensors such as sap flow, soil moisture, weather parameters, and more.

At Edaphic Scientific we want to work with you from the start of your project through to its completion. We can provide:

- Assistance with project and experimental design
- Procurement of all monitoring equipment, including sensors, data loggers and data management software. Edaphic Scientific is a one-stop shop where we can source and find any necessary equipment for your project from our preferred suppliers or third party suppliers
- Installation and training
- On-going assistance with data interpretation and equipment maintenance
- Data correction and analysis, including statistical analysis with the R-package
- Report and publication preparation including tables, figures, graphs, and manuscript writing

advanced data collection and management solutions



Edaphic Scientific recognises the need for flexible and adaptable sensor and data logging solutions for experimental or environmental monitoring projects.

Data can be downloaded directly in the field from data loggers. A direct connection between the data loggers and your computer, via a USB cable, can be used for manual downloading of data.

Alternatively, data can be downloaded over the internet on your iPhone, iPad or desktop computer with the Eagle.io cloud-based, data management software solutions. Through this remote based downloading capabilities, you can download, view and manage your data, and system, anywhere in the world and at anytime.

## manual & docs

- Drill & Drop Manual
- How to calibrate soil moisture sensors
- What is a capacitance sensor?
- 5 common mistakes when measuring soil moisture
- The Soil Water Compendium

## videos

## related products

- Monitoring systems
- Soil moisture sensors, probes and meters
- Soil water potential sensors
- Soil CO<sub>2</sub> concentration
- Weather stations