

MEA2266 TBug Soil Moisture Logger

The MEA Bug soil moisture loggers are a low cost, continuously recording, soil moisture monitoring system. The Bug system is simple to use and incorporates all the functionality needed for soil moisture monitoring.

The TBug is one of four soil moisture loggers in MEA's Bug range. It is designed to work with up to four SM200 or Theta Probe soil moisture sensors.

The TBug is used with the MEA Retriever to capture soil moisture and soil temperature data from the SM200 or Theta Probe sensors, without the need for expensive cable or telemetry systems.



Readings can be collected in the field in a matter of seconds. The data can be analysed on the spot and taken back to the office for interpretation on a computer.

The Theta Probe soil moisture sensor is an accurate volumetric soil moisture sensor, and the SM200 is a slightly smaller, lower cost version of the same sensor.

Both sensors are easy to install using an auger. Installation does not need specialist tools or expertise, and can be readily relocated from site to site. Sensors can be installed in horizontal or vertical arrays.

Individual sensors are small enough to use in pot plants and decorative and landscaping pots.

Readings of soil moisture are taken automatically every 15 minutes. The readings are stored within the memory of the TBug.

The memory is structured so that it always holds the last 28 days worth of readings: eight days at 15 minute intervals and 20 days at two hourly intervals.

Data from the TBUGs is collected using the MEA Retriever. The readings are transferred to the Retriever by wireless connection.

To download data, hold the Retriever within a metre of the TBug, tap the TBug to wake it up and the data is automatically transferred.

The Retriever display will show the current readings, confirming that the transfer has been successful. In the field assessments can be made without the use of a laptop computer.

The Retriever can download between 25 and 100 sites depending on the mix of TBUGs, ABUGs, GBUGs and GTBUGs in use.

The data stored in the memory of the Retriever is then downloaded to a Windows compatible PC using the software program provided. Soil moisture data can be viewed in graph or tabular form. Full and refill points can be set for the soil moisture values and data can be exported easily to other programs.

The Theta Probe and SM200 sensors are connected to the TBug via weatherproof connectors. Power for the TBug and sensors comes from a set of 4 alkaline batteries.