GT-BUG SOIL TEMPERATURE AND SOIL MOISTURE LOGGER.

DESCRIPTION. The GT-Bug is an extension to the popular G-Bug family of soil moisture loggers. With the GT-Bug it is possible to log both soil temperature and soil moisture from the one low cost device. The GT-Bug not only allows you to optimise the efficiency of your irrigation events but you can also time the application of fertiliser for optimum nutrient uptake. This information also assists you to choose the peak conditions for seeding a new crop. The GT-Bug, in conjunction with the MEA Retriever provides a unique combination of simplicity, functionality and ease of use. Readings can be collected in the field in a matter of seconds. The data can be analysed on the spot and then taken back to the office for interpretation on a computer.

HOW IS IT USED? The GT-Bug is supplied with a soil temperature sensor which reads over the range -5 to +45 degrees Celsius. In addition to the soil temperature sensor, up to 3 gypsum blocks (any combination of GBHeavy and GBLite) can be connected to the GT-Bug. Readings of soil moisture and soil temperature are taken automatically every 2 hours. The readings are stored within the memory of the GT-Bug. The memory is structured so that it always holds the last 20 days worth of readings.

The readings are transferred to the MEA Retriever by wireless connection. To download data, hold the MEA Retriever within 1 metre of the GT-Bug, tap the GT-Bug to wake it up and the data is transferred. The MEA Retriever display will show the current readings, confirming that the transfer has been successful. The soil temperature sensor reading will display in the right most column on the screen. To see changes in temperature and soil moisture over time, scroll back through the readings stored in the MEA Retriever. In the field assessments can be made without the use of a laptop computer.

The MEA Retriever can download 100 sites and each site can have either a G-Bug or GT-Bug installed. The data stored in the memory of the MEA Retriever is then downloaded to a Windows compatible PC using the software program provided. Soil moisture and soil temperature readings can be displayed on the one graph: the left axis shows the soil moisture levels and the right axis soil temperature. Readings can also be viewed in tabular form. Full and refill points can be set for the soil moisture values and data can be exported easily to other programs.

The temperature sensor is hard cabled to the GT-Bug whilst the gypsum blocks are attached to the GT-Bug using Scotchlock cable joiners.

SPECIFICATIONS.

Part number	***Description***	***Comments***
2263	GT-Bug	Data logger for soil temperature sensor and up to 3 gypsum blocks.
2261	MEARetriever	Collects data from the GT-Bugs and G-Bugs. Transfers the data to a PC. Software displays recorded data in graphs and tables.

RELATED PRODUCTS.

2262	G-Bug	Data logger for gypsum blocks.
2176 deficit	GBHeavy	GBHeavy gypsum block sensor for use in clay loam soils under irrigation.
2195	GBLite	Watermark sensor used in all soil types when moisture levels are kept in the RAW range or for deficit irrigation in sandy soils.
2193	GBAuger	Auger for efficient gypsum block and soil temperature sensor installation.

MEASUREMENT ENGINEERING AUSTRALIA
MEA
www.mea.com.au