

# Gypsum Blocks

## Gypsum Block Soil Moisture Sensors

Gypsum blocks are reliable, inexpensive sensors for measuring soil moisture tension. Gypsum blocks are a maintenance-free alternative to tensiometers. Soil moisture tension is a measure of how tightly water is bound to soil particles and indicates how hard the plant roots have to work to extract water out of the soil. Soil moisture tension is displayed as a pressure value, in Kilo Pascals (kPa).

- **Reliable, inexpensive**
- **Maintenance-free sensors**
- **No calibration required**

Gypsum block sensors are quickly and easily installed with unsophisticated equipment. Simply auger a hole to the required depth, insert the block and backfill the hole with a mix of sand, Bentonite and dirt.

The expected life of a buried sensor is 5 years (although this can vary according to soil type and typical moisture levels of your soil).

Moisture values can be recorded and displayed using MEA's Bug system of loggers, Retrievers and Bug software. Gypsum blocks can also be used with Plexus, MEA Radio and SML.

## Applications

MEA distributes two types of gypsum block sensors - the GBLite and the GBHeavy - to suit different soil profile and irrigation needs.

GBLites are most suited for light soils however they can be used in all soil types.

Where deficit irrigation is required or the soil is poor draining, as is the case with heavy clays, GBHeavys are used.

Gypsum blocks can be used as single sensors, or in vertical arrays to provide soil moisture profiling.



## Specifications for GBHeavy

Measurement Range 50 to 500 kPa

Suitable for

Heavy clay soils, deficit irrigation regimes or as a drainage sensor below GBLites.

## Specifications for GBLite

Measurement Range 0 to 200 kPa

Suitable for

Most soil types and where greater resolution is required at low tension values.

