

SOIL MOISTURE SENSOR

Soil water helps in chemical and biological activities of soil

UTILITY AREA

- Agriculture
- Hydrology
- Draught management
- Automatic irrigation
- Water conservation



Soil water is the major component of the soil in relation to plant growth. If the moisture content of a soil is optimum for plant growth, plants can readily absorb soil water. Not all the water, held in soil, is available to plants. Much of water remains in the soil as a thin film. Soil water dissolves salts and makes up the soil solution, which is important as medium for supply of nutrients to growing plants.

ISM01 provides precise and low cost monitoring of soil moisture content. These probes are small, rugged and low power ISM01 measures the dielectric constant of the soil using capacitance/frequency domain technology. Its high frequency operation minimizes salinity effect, making it more accurate. ISM01 offers rapid response, reading can be taken within few seconds after inserting the probe in soil

SPECIFICATION

- Power consumption < 7mA
- Supply Voltage 3.3V to 20 VDC.
- Power on to Output stable .. 400 ms
- Output Impedance 10K ohms
- Operational Temperature -40°C to 85°C
- Accuracy at 25°C 2%
- Dimensions 22 mm diameter x 76 mm
- Output 0 to 3V related to moisture conten