



LEAF WATER METER

Next generation of smart agriculture

APPLICATIONS

Measure water variation in vivo samples
 Monitor effects of stress
 Help to determine irrigation requirements
 Research
 Teaching

FEATURES

Non-invasive, non-destructive measurements
 Light weight and easy to install
 Real time online display of data
 LoRaWAN technology
 Optional solar panel for power supply

TECH SPECS

Optical parameters measured: Optical absorption in two different wavelength (880 nm and 1450 nm).

Spectrometric sensor: 3

Test area: 2 cm²

Optical resolution: +/- 1% SDI

Light sources:

- Led IR (peak 880 nm)
- Led SWIR (peak 1450 nm)

Light sensors:

- IR photodiode
- SWIR InGaAS photodiode

ADC resolution: 10 bit

Measurement technique: Average value of 100 samples

User interface: Website

Connectivity: LoRa

Environment sensors: Temperature, relative humidity, luminosity and soil moisture.

Temperature resolution: 1°C

Temperature precision: ±1°C

Relative humidity resolution: 1%

Relative humidity precision: ±3% (5%-95%, 25°C)

Luminosity measurable range: 0-65535 lux

Luminosity resolution: 1 lux

Luminosity precision: ±7% (25°C)

Soil moisture resolution: 1%

Soil moisture precision: ±3% (0-53%); ±5%(53-100%)

Operating temperature: -10 °C to 80 °C

Supply voltage: 12V