Essential Water Potential Data

MAKE FAST, ACCURATE WATER POTENTIAL MEASUREMENTS IN THE LAB

Measure the water potential of soil, soilless substrate, plant tissue, or any porous material in 5 to 10 minutes. Effective range: -0.1 to -300 MPa.*

The WP4C measures water potential by determining the relative humidity of the air above a sample in a closed chamber (an AOAC-approved method, conforms to ASTM 6836).

**Note: WP4C will read to 0 MPa, but readings of samples wetter than -0.1 MPa will have an increasing, and typically unacceptable, percentage of error. Some users may be able to make useful measurements in samples wetter than -0.1 MPa using special techniques. For more information, see the WP4C User Manual.*

How does sample disturbance affect readings?
Read the "Effects of Sample Disturbance on Soil Water Potential Measurements" Application Note at **www.decagon.com/sampledisturbance**

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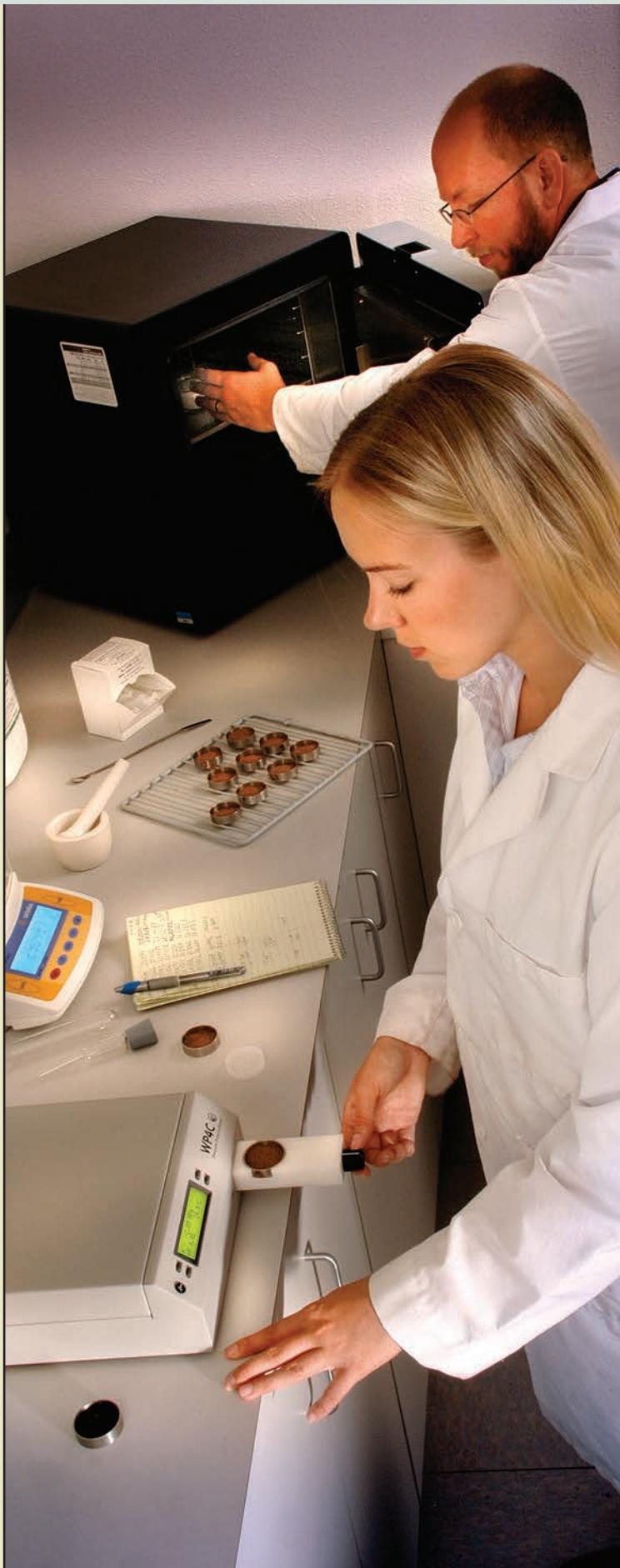
www.decagondevices.com



WP4C SPECIFICATIONS

Operating Environment
5 to 43°C (41 to 110°F)

Temperature Control
15° to 40°C ± 0.2 °C

Sensors
1. Infrared temperature. 2. Chilled-mirror dew point

Range 0 to -300 MPa

Accuracy
± 0.05 MPa from 0 to -5 MPa, ± 1% from -5 to -300 MPa

Read time Typically 5 to 10 minutes

Interface Cable Serial cable (included)

Data Communications
RS232 compatible, 8-bit ASCII code, 9600 baud, no parity, 1 stop bit

Weight 3.2 kg (5.2 kg shipping weight)

Universal Power 110/ 220V AC, 50/60Hz

Sample dish capacity 7ml recommended (15ml full)
25 plastic cups and 10 stainless steel cups included

Calibration Standard 0.5 molal KCl (-2.19MPa)

APPLICATIONS

- Soil moisture characteristics
- Root zone water potential profiles
- Leaf water potential
- Seed priming
- Seed water relations
- Expansive soil characterization

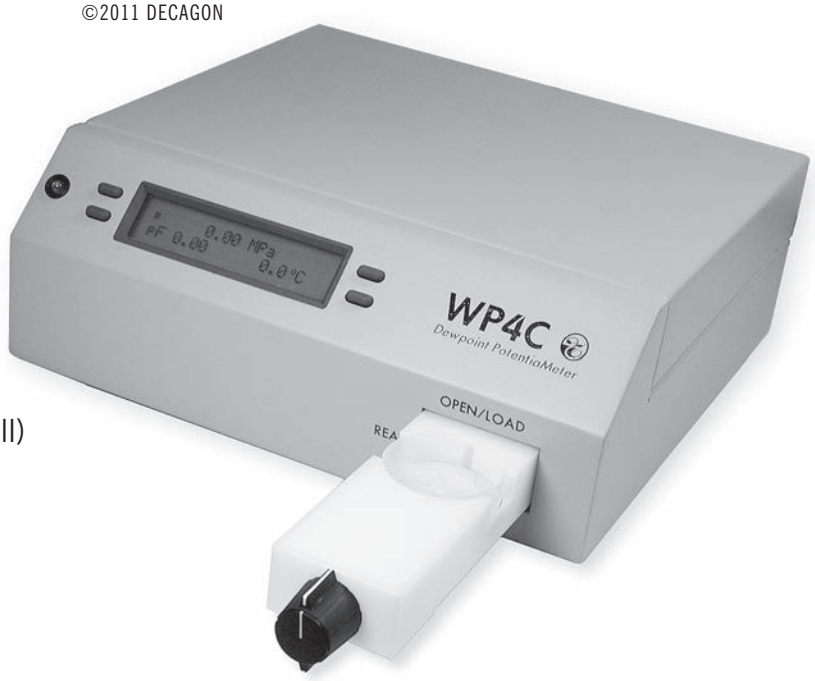
NEW FEATURES

- **Precise Mode**—verifies full equilibrium before displaying a final reading.

- **Speedy Equilibration**—new hydrophobic teflon impregnated nickel alloy sample chamber coating reduces equilibration time.

- **Finely-Tuned Adjustments**—new algorithms allow precision calibration and ± 0.05 MPa (or better) accuracy.

- **Better range and accuracy**—resolves temperatures to a thousandth of a degree to push the functional range to -0.1 MPa.



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