

# MAKE FAST, ACCURATE WATER POTENTIAL MEASUREMENTS IN THE LAB

easure the water potential of soil, soilless substrate, plant tissue, or any porous material in 10 to 15 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.

**Watch a video** to learn more about the WP4C and it's fast, accurate water potential measurements. **www.decagon.com/wp4c** 





## **WP4C SPECIFICATIONS**

# **Operating Environment**

5 to 43°C (41 to 110°F)

# **Temperature Control**

 $15^{\circ}$  to  $40^{\circ}$ C  $\pm 0.2 ^{\circ}$ C

#### Sensors

1. Infrared temperature. 2. Chilled-mirror dewpoint

Range -0.1 to -300 MPa

# Accuracy

 $\pm 0.05$  MPa from 0 to -5 MPa,  $\pm 1\%$  from -5 to -300 MPa

**Read time** Typically 10 to 15 minutes for most soil samples. 20 minutes for plant tissue samples.

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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