



# LABCELL LTD

QUALITY • SUPPORT • RELIABILITY

## WATER ACTIVITY (ERH) MONITOR

### AQUALAB SERIES 4TE / 4TEV



Water Activity (or ERH) is a measure of the free water available for mould growth and bacteria. It influences a product's shelf life, odour, colour, flavour and texture. The AquaLab is used to determine and control the optimum water activity to produce the highest quality product with the least amount of preservative.

The New Series 4TE and 4TEV offers two types of sensor, one with a dual capacitance and dewpoint sensor the other with the standard dewpoint.

#### SPECIFICATIONS

Series 4 TE Sensor:	Chilled Mirror Dewpoint
Series 4 TEV Sensor:	Dual Sensor Block (integrated dewpoint and capacitance sensor)
Measurement range:	0.030 to 1.000 aW
Accuracy:	+/- 0.003 aW (+/- 0.015 capacitance sensor 4TEV)
Resolution:	0.0001 (4 decimal places)
Operating Environment:	4 to 50°C 0 to 90% RH
Operating Temperature Control:	Between 15 and 50°C Controlled to within 0.5, 1.0 or 4.0°C (User defined)
Power:	Universal 110V to 220V AC (mains cable included)
Output:	RS232 to printer / PC
Supplied with:	Sample cups / lids, verification salts, mains cable, operating manual and certificate of calibration

HACCP, ISO9000 and GMP compliant  
AOAC Approved method  
Calibrated to NIST

#### Features

- Rapid measurements – typically less than 5 minutes
- Precise aW values – to within +/- 0.003aW
- Wide operating range (0.030 to 1.000aW)
- Integral sample temperature control
- Simple to use, easy to maintain
- On-board diagnostics – self condition monitor
- Individual user setup
- Robust sensing technology
- Language option
- Internal data storage

#### Applications

- Quality Assurance
- Research & Development Labs
- NPD Kitchens
- Shelf life Determination & Control
- Microbial Detection

#### Typical areas of use

- Foods (e.g. baked goods, sauces, cooked meats)
- Raw Ingredients
- Pharmaceutical Ingredients
- Tablets, Skin creams, Toothpastes
- Animal Feeds
- Blood, Skin Tissue and Wound Treatment
- Soils and Plant Research

#### Series 4TE and 4TEV applications

##### Integral sample temperature control:

- To minimize ambient temperature fluctuations
- To compare aW values of samples at different temperatures
- Accelerated shelf-life studies
- Packaging and storage simulation
- Cross-site manufacturing comparison
- Isotherm studies
- Dual sensor for Volatile Sampling