

AQUALAB 4TE

Water Activity Meter



Master food safety

Fast. Precise. First. The AQUALAB leads the market in speed and accuracy.

Speed and accuracy

Measure water activity (a_w) in 5 minutes or less (average read time: 2.5 minutes) with $\pm 0.003~a_w$ accuracy. AQUALAB instruments are the fastest, most precise water activity meters available.

Measure anywhere

Use the AQUALAB 4TE to get lab-quality measurements at the line, receiving dock, processing plant, storage facility—anywhere you need to test and verify the safety and quality of your products and ingredients.

Internal temperature control lets you set a measuring temperature between 15 and 50 °C and use the instrument anywhere—even outside the QC lab.

How it works

The secret to the 4TE's speed and accuracy is in its unique chilled mirror dew point sensor. The dew point sensor is a primary measure of water activity. Dew point is the temperature at which a sample of moist air at constant pressure reaches water vapor saturation. Unlike other water activity sensors, the dew point sensor actually measures water activity (a_w), not some secondary parameter merely correlated with water activity (a_w). This makes the 4TE extremely accurate, so you can have complete confidence in your sample readings.

Easy to clean

The sample chamber lid flips up so contamination in the sample chamber is quick to spot and easy to clean.

Secure food safety data

The AQUALAB water activity meter 4TE stores time, date, and user information with every measurement and calibration, and can store up to 10,000 secure data points. Administrative functions can be set to control access to data. Designate up to 25 unique users and passwords. Use the RS-232 serial data port to download or print data for statistical analysis and to maintain compliance records and archives.

AQUALAB 4TE SPECIFICATIONS

TECHNICAL SPECIFICATIONS

Measurement Specifications

Water Activity
Range: 0.030-1.000 a_w

Resolution: 0.0001 a

Accuracy: ±0.003 (4TE dew point) ± 0.015 (4TEV capacitance)

Repeatability: 0.001 a_w

Temperature Range: 15-50 °C

Resolution: 0.01 °C

Accuracy: ±0.1 °C

Read time ~5 min

Physical

Specifications

Case dimensions Length: 26.7 cm (10.5 in)

Width: 17.8 cm (7.0 in) Height: 12.7 cm (5.0 in)

Case material POLYLAC PA-765 (ABS) with fire retardant

Sample cup capacity 14 mL (0.47 fl oz)

Weight 3.1 kg (6.8 lb)

Display 64 × 128 graphical

Operating temperature Minimum: 4 °C

Maximum: 50 °C

Operating environment 0%-90% noncondensing

Data communications USB A and RS-232 serial

9,600-115,000 baud

Power 110-220 VAC

50/60 Hz

COMPLIANCE Complies with ISO 18787:2017

Manufactured under ISO 9001:2015 EM ISO/IEC 17050:2010 (CE Mark)

FEATURES SUMMARY

· Fast: 5 minutes or less

Accurate: ±0.003 a...

· Verifiable with standards

Repeatable

· Portable: 3 kg

• Easy to use: Precise measurements,

minimal training

Secure: Conforms to 21 Part CFR 11

• Proven: Used by 90+ of the top 100 US

food manufacturers