

## **AQUALAB3**

# One-minute total moisture analyzer (water activity + moisture content)



#### One-minute analysis

Depending on the sample, measuring water activity  $(a_w)$  can take up to 5 minutes – even longer for coated products, products high in fat, or products containing volatile compounds. With the AQUALAB 3 combined with SKALA-powered predictive AI, readings on a single sample take just one minute.

#### Precise and reliable

Other "fast" water activity and moisture content measurements are inaccurate. AQUALAB 3 delivers 10X the accuracy of the average moisture balance. Precise, reliable readings allow for tighter moisture specs, which helps improve yields while maintaining product safety.

#### **Total control**

Poor moisture control can profoundly impact revenue potential through failed batches and rework. Get predictive indicators within 60 seconds to adjust parameters like belt speed, temperature and water content – before the issue occurs. Fast, precise measurements help ensure moisture control at the line.

#### From the masters of science

Designed for accurate water activity and precision moisture content measurements in a wide range of products and materials, AQUALAB 3 provides total moisture analysis. Its rapid, reliable, and repeatable for quick insights leading to better process control.

#### Fully stackable

The AQUALAB 3 is fully stackable with a small footprint. Saving space in production and process control areas is crucial.

#### **Tablet interface option**

Routine operations have never been so easy. Get the information you need in one glance with AQUALAB 3's ruggedized tablet interface option.

#### **Built for abuse**

Take readings in the harshest conditions – on the line or in receiving and shipping areas. AQUALAB 3 doesn't need a pristine lab to consistently deliver quality data.

#### Efficient, human-centric design

AQUALAB solutions win design awards across the globe. Device training is simple, operation is intuitive, and the resulting productivity gains are invaluable.

#### Widely used throughout the food industry

Over 92% of the top 100 food companies use AQUALAB devices. Throughout formulation, production and QA – from raw ingredients to final product and anything in-between.

#### Compliance uncomplicated

Satisfying auditors – no matter the regulatory body – couldn't be simpler. AQUALAB solutions help you sync and secure data, manage users, and connect other devices with ease.

### **AQUALAB3 SPECIFICATIONS**

#### **TECHNICAL SPECIFICATIONS**

Measurement Specifications

Water Activity Range: 0.030 to 1.000 a<sub>w</sub>

Resolution: 0.001 a<sub>w</sub>
Accuracy: ±0.005 a<sub>w</sub> (dew p

Accuracy: ±0.005 a<sub>w</sub> (dew point), ±0.015 a<sub>w</sub> (capacitance)
Repeatability: 0.002 a<sub>w</sub> (dew point), 0.010 a<sub>w</sub> (capacitance)
Sensor Type: Chilled mirror dew point and capacitive hygrometer

**Moisture Content Precision:** 0.1 – 0.5 % to moisture content reference

Repeatability: 0.02%

**Read Time** Minimum: 60 s (One-Minute Water Activity Mode; subscription required)

**Maximum:** ≥ 200 s (estimated)

**Physical Specifications** 

Case Dimensions Length: 23.4 cm (9.2 in)

**Width:** 23.4 cm (9.2 in) **Height:** 12.1 cm (5.0 in)

Case Material Polycarbonate-ABS (PC-ABS)

Universal Power 110 – 240 V AC

**Display** iPad or external laptop or desktop

Sample Cup Capacity 7.5 mL (0.25 fl oz), partially full, recommended 15 mL (0.51 fl oz), full

Operating Temperature Controlled at Constant: 25.00 °C

Accuracy: ± 0.10 °C Resolution: 0.10 °C Minimum: 15.00 °C Maximum: 35.00 °C

**Operating Environment** 0.0 - 90.0 % RH noncondensing

**Weight** 5.0 kg (11 lb)

Data Communications USB A to USB B; 9,600 baud

#### FEATURES SUMMARY

- Fast: water activity and moisture content readings in 1 minute
- Easy to use: precise measurements, minimal training
- Expandable: connect and manage multiple units with one iPad or external laptop or desktop
- Repeatable: certified standards for repeatability across users and locations
- Optional block exchange program: includes annual recalibration, extended warranty, and service plan
- No down time waiting for the whole instrument to be shipped here and back