

AQUALAB

AQUALAB 3

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.

AQUALAB 3 SPECIFICATIONS

TECHNICAL SPECIFICATIONS

Measurement Specifications	Water Activity	Range: 0.030 to 1.000 a_w Resolution: 0.001 a_w Accuracy: $\pm 0.005 a_w$ (dew point), $\pm 0.015 a_w$ (capacitance) Repeatability: 0.002 a_w (dew point), 0.010 a_w (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**