

AQUALAB 5TE



Measurement Specifications

WATER ACTIVITY

Range:
0.0300 - 1.0000 a_w

Resolution:
0.0001 a_w

Accuracy:
±0.0030 a_w

Repeatability:
±0.0010 a_w

Drift:
±0.0020 a_w

Sensor type:
Chilled-Mirror Dew Point

MOISTURE CONTENT

Range:
0.00 - 100.00 % MC

Resolution:
0.01 % MC

Accuracy:
±0.5 % of moisture content
reference

Repeatability:
0.01 %

Sensor type:
Secondary method - uses
moisture sorption isotherm and
water activity

TEMPERATURE

Range:
15.00 – 50.00 °C

Resolution:
0.01 °C

Accuracy:
±0.1 °C

READING MODES

- One Minute
- Standard
- Continuous
- Low Emitting
- ISO 18787

READ TIME

Minimum:
60 sec

Typical:
~5 min

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Functional Specifications

Modular swappable block:

The water activity sensor block is easily swappable for service or repair.

Touchscreen:

Features a touchscreen with sufficient size and resolution to adequately convey a simplified and streamlined interface for water activity measurements. (7 inch display with 1024 × 600 pixel resolution)

PCAP touch interface

- Capable of detecting keypresses and swipe gestures
- Supports double nitrile glove operation
- Easily cleanable.

Calibration:

- Water activity verification standard multi-point calibration
- NIST traceable temperature calibration
- Moisture Content Offset Adjustment

21 CFR Part 11 compliant:

- Electronic Records
- Validation
- Audit Trails
- Data Integrity
- Record Retention

AQUALAB Cloud integration:

- Synchronizes site settings, user profiles, audit information, and measurement data between the **AQUALAB Cloud** and other **AQUALAB 5TE** units on-site.
- Allows users to continue to measure products even if the network is unreliable.

Ease-of-use:

- Usable even by untrained users.
- On-screen help for operation and troubleshooting.
- Multilingual native support for English, Spanish, French, Chinese, Japanese, Portuguese, German, and Italian.

Sealable sample chamber:

- Used to equilibrate samples during measurement in order to determine water activity.

Speaker:

- For status alerts, user-configurable on/off.

Full standalone option:

- Allows for basic reading, verification, reading notes, firmware updates, and access control capabilities without an AQUALAB Cloud connection

Eligible for international sales in compliance with the following regulatory requirements::

- FCC
- CE
- Conflict Minerals
- RoHS
- REACH

Power:

- External power module via barrel plug sufficient for powering the device.

USB 2.0 support:

- 4 x USB-A ports to support keyboards, mice, wireless network adapters, USB drives, and barcode scanners
- 1 x USB-B receptacle for CSV and PDF export of data directly to a PC or printer

LED light bar:

- Instant reading and instrument status from across the room.

Network connection:

- RJ45 Ethernet jack
- At least 100 mbps support
 - Wiring TIA/EIA-568B

Wireless network

- 2.4 GHz band
 - 802.11 b/g/n protocols
 - At least 100 Mbps support
- Supports dynamic and static IPs, router, subnet mask and DNS server configurations.

Network requirements:

For cloud connectivity, the instrument must be able to connect to cloud.aqualab.com