

**HORIBA**  
Scientific

**OneTemp**<sup>®</sup> pty Ltd  
MEASURE | CONTROL | RECORD

# LAQUA

LAQUAtwin Ca-11C Waterproof Pocket Bovine Blood Calcium Meter



MADE IN  
JAPAN

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**HORIBA**

# LAQUAtwin

## Compact Bovine Blood iCa Checker

Calcium is an important macro mineral for dairy cows. Measurement of ionized calcium (iCa) on site can be of great value to veterinarians and producers. An innovative and lower cost instrument could help with more timely decisions and avoid submission of blood samples to a laboratory. The dairy veterinary field is progressively studying subclinical hypocalcemia. To detect this condition real time using the LAQUAtwin Ca-11C can make a significant improvement in an animal's health.

### Instant Results

The measured ionized calcium value should give a good indication of the animals' health and probability of contracting hypocalcemia or hypercalcemia.

### Fast Screening

Short analysis on-site ensures quicker response to the animal's healthcare.

### On-Site Measurements

Collect blood from the animal and place a drop or two on the sensor.

### Whole Blood or Serum

The meter can be used to measure not only whole blood but also serum.

### Economical

Monitor animal's health at a fraction of the cost of available methods employing commercial blood analyzers.

**Replaceable Sensor**  
The flat sensor is easy to clean, which is important when handling samples containing proteins. It will last for at least 1,000 measurements and can simply be replaced.

**Indicators**  
Various indicators appear such as a smiley once the value is stable, low battery indicator and measurement mode.

**Backlight**  
For easy viewing in the dark. It also flashes when the batteries run low.

**3-Button Operation**  
The instrument is so easy to use that only 3 buttons are required for operation

**IP67 Water- and Dustproof Housing**  
The instrument is completely water – and dustproof which ensures durability and a long lifetime even in the harshest conditions.

**IP67**

**Accuracy in a single drop**  
Incorporating the same parts as standard laboratory electrodes, the LAQUAtwin compact meters are built with miniaturised components and unique flat sensor chip, which is less than 1 mm thick, a result of 60 years of HORIBA's sensor engineering technology.

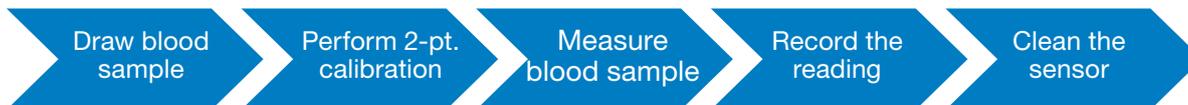
Thickness Approx. 0.8 mm

Reference electrode  
Liquid junction  
Ion selective membrane  
Ag/AgCl  
Temperature sensor



## Easy Measurement

Calibrate the meter with standard solutions then measure the blood sample.



Scan code to view video online



## Complete Set

Perform your measurements wherever you want, whenever is needed.



Package includes:

- LAQUAtwin Ca-11C
- Y052L 1.25mmol/L Standard solution (25ml x 2)
- Y052H 2.50mmol/L Standard solution (25ml x 2)
- 251 Cleaning solution (250ml) x 3
- CR2032 batteries x 2
- Wash bottle
- Instruction & quick manuals
- Carrying case

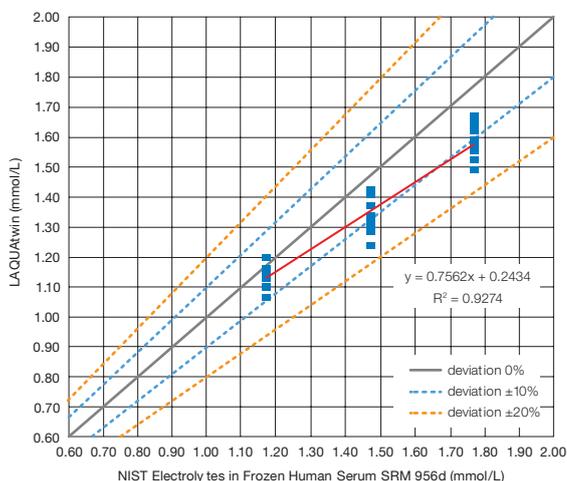
## Meter Specifications

Model	LAQUAtwin Ca-11C
Target Ion	Calcium (Ca <sup>2+</sup> )
Measurement Principle	Ion Selective Electrode
Sample Volume	0.3 ml (Minimum)
Measurement Range	0.1 to 5.0 mmol/L
Resolution	0.1 or 0.01 mmol/L
Accuracy	± 20% of reading value
Calibration	2 points (1.25 & 2.50 mmol/L)
Recommended Sample Temperature	20 to 25°C
Operating Environment	5 to 40°C; 85% or less relative humidity (no condensation)
IP Rating	IP67 water- and dustproof
Display	Custom (monochrome) digital LCD with backlight
Power & Battery Life	2 x CR2032, 150 hours
Dimensions	164x29x20mm (meter), 274x235x75mm (carrying case)
Weight	50g (meter), 530g (complete set)

## Ordering Information

Part No.	Model	Description
3200772940	LAQUAtwin Ca-11C	Includes meter, sensor, batteries, Y052L, Y052H, 251 x 3, wash bottle, manuals, & carrying case
3200772945	S051	Calcium ion sensor
3200774921	Y053	Solution kit – Y052L, Y052H, & 251 x 3
3200774598	Y052L	1.25 mmol/L standard solution (25ml x 2)
3200774599	Y052H	2.50 mmol/L standard solution (25ml x 2)
3200774601	251	Cleaning solution (250ml)

## Measurement results shows high correlation with NIST standard.



\*An internal investigation



Scan code to view app note

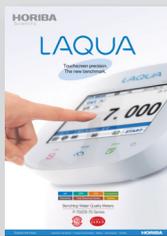


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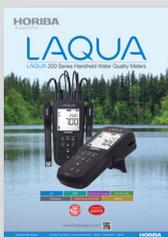
Water Quality Analyzers

With over 60 years of engineering excellence, HORIBA's diverse range of water quality analyzers and electrodes are ideal for everyday laboratory needs through to the most demanding of applications. Visit our website for a wealth of useful information and water quality measurement tips to help you obtain the best results in your work.



**Benchtop Meters**

Developed using extensive feedback from users, our new LAQUA meters deliver the best solution for water quality analysis. Our LAQUA website features an online 'Selection Guide' to enable you to find the perfect LAQUA meter and electrode for your need.



**Handheld Meters**

In the lab, in the field or anywhere you need it. LAQUA Handheld meters are designed for use with one hand and with an IP67 waterproof rating and shock-resistant casing. Meters can be used for long periods, even in dark places, making it ideal for field measurements in rivers and lakes.



**Electrodes**

Various electrodes to match any application. A wide range of products for both benchtop and portable systems are available, including easy and reliable standard models, application-focused models for small samples or large containers, and special electrodes for specific sample characteristics.



**Pocket Meters**

Analyzing water quality is simplified when using our LAQUAtwin range of meters. Designed to produce accurate and reliable results. Anyone, anywhere, at any time can measure samples easily with a LAQUAtwin meter. See just how good they are at our website.



**Application Notes**

LAQUAtwin pocket meters offer quick and convenient alternative to analyze important parameters with high accuracy. Several application notes are available at (<http://goo.gl/znwE6j>) detailing the use of LAQUAtwin and the results achieved for the respective applications. Additional application notes will be added when available.



Visit the **HORIBA LAQUA Singapore** Channel on YouTube and subscribe to see more of our videos.



**RoHS**



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