



ULTRASONIC · HANDHELD · CM11094

HANDHELD WEATHER

A precision weather station in the palm of your hand: wind speed and direction, temperature, humidity and pressure.

DAME DESIGN AWARDS · CALYPSOINSTRUMENTS.COM



A Weather Station, or a Handheld. Never Both.

WHAT THE FIELD HAS TODAY

Full weather stations are fixed, mounted installations

Spinning cups and vanes wear, jam and drift out of calibration

WHAT THE FIELD ASKS FOR

Five readings on one screen, one instrument to carry

Solid-state sensing with nothing to wear out

A physical keypad that never misses an input

THE OPPORTUNITY

The first compact, lightweight unit to combine ultrasonic wind measurement with temperature, humidity and pressure.

SOLID STATE · NO MOVING PARTS

Five Readings, One Instrument

Wind speed and direction, plus temperature, humidity and pressure.

0.5-45 M/S WIND SPEED	0-359° WIND DIRECTION	-15/60 °C TEMPERATURE
10-90 % HUMIDITY	500-1200 HPA PRESSURE	1 Hz SAMPLE RATE



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ULTRASONIC HEAD · 4 TRANSDUCERS

A New Category of Field Instrument

01

Wind Plus Weather

Ultrasonic wind speed and direction alongside temperature, humidity and pressure.

02

Color Display

A 1.44" full-color TFT panel with a summary screen and one screen per sensor.

03

Physical Keypad

One-handed control that keeps working wet, gloved, or salt-sprayed.

04

180 g, IP66

Ø43 × 150 mm in injected engineering plastic, sealed for weather and spray.

05

No Moving Parts

Solid-state sensing — nothing to wear, jam, or drift out of calibration.

06

AA + USB-C Power

A replaceable AA cell in the field; USB-C static mode for continuous monitoring.

07

BLE 5.1 + Logging

On-device data logging, exported and graphed over Bluetooth in AnemoTracker.

08

Tripod or Hand

A 1/4" thread and included tripod mount turn the handheld into a fixed station.



INDUSTRIAL DESIGN

Built Around the Hand, Not the Lab

01 One-Handed Operation

Nine keys, all reachable with a thumb. Up and down step through the five reading screens; right opens the min, average and max for that sensor.

02 Works in Gloves and Spray

A physical keypad, not a touchscreen, so wet hands and salt spray never cause a missed input.

03 Readable Day and Night

A stepped backlight, a night mode that inverts the panel, and an eco mode that trims everything down to protect the battery.

04 Carried, Not Installed

180 g on a wrist lanyard, with an alignment mark for orienting to north and a tripod thread when the reading has to stay put.



CALYPSO
instruments

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Designed to Last, Not to Be Replaced

One instrument instead of two and a battery you can change

01

One Instrument, Not Two

Wind and weather in a single 180 g unit means one device manufactured, shipped and eventually recycled instead of two.

02

No Moving Parts

Solid-state ultrasonic sensing outlasts mechanical cup-and-vane designs and needs almost no maintenance — only clean, aligned transducers.

03

Replaceable Power

A standard AA cell behind a captive screw so the battery gets replaced, not the instrument.

04

Made in Zaragoza

Built in-house in Spain, close to our main customer base, and shipped in a cardboard box rather than foam or plastic inserts.

Technical Specifications

Wind speed 0.5 – 45 m/s (1.12 – 100 mph)

Speed accuracy 0.3 m/s or 3% (0–16 m/s) · 5% (16–45 m/s)

Wind direction 0 – 359° · resolution 1°

Direction accuracy 3° (1–5 m/s) · 1° (5–16 m/s) · 6° (16–45 m/s)

Temperature –15 to 60 °C · ± 0.5 °C at 25 °C · res. 0.01 °C

Humidity 10 – 90 % · ± 3.5 % · res. 1 %

Pressure 500 – 1200 hPa · ± 1 hPa · res. 0.1 hPa

Sensors 4× ultrasonic transducers · SHT40 · DPS368 · NTC

Sample rate 1 Hz

Every unit is calibrated to the same standard.

Display 1.44" full-color TFT LCD · 128 × 128 px

Power Lithium AA battery · USB-C in static mode

Connectivity Bluetooth BLE 5.1 or beyond · ~30 m open space

Firmware Upgradable over Bluetooth

Configurable units m/s · km/h · knots · mph · °C/°F/K · hPa/inHg/mmHg/kPa/atm

Dimensions Ø 43 mm × 150 mm (1.69 × 5.91 in.) · 180 g

Material Injected engineering plastic (grey)

Environmental IP66 · –15 / 60 °C · 10 – 90 %RH

Mount 1/4" female thread · tripod mount included

Twelve Years of Ultrasonic Know-How



2014

The original

First wireless, solar-powered masthead sensor.

DAME DESIGN
AWARD



2017

Portable Solar

DAME Award nominee. The cruiser classic fit & forget.

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AWARDS
SPECIAL MENTION
2021



2021

Ultrasonic Portable Mini

DAME Special Mention. Smallest ultrasonic on the market.



2026

Handheld WEATHER

The same sensing core, in the hand. Wind, temperature, humidity and pressure.

More than 50,000 ultrasonic units shipped across industries – a scientific instrument, calibrated one by one.



HANDHELD SPORTS · WIND ONLY

SPECIAL MENTION

One Platform, Two Instruments

Handheld WEATHER shares its housing, keypad, display and ultrasonic head with Handheld SPORTS – the wind-only model for sailors and athletes who need speed and direction and nothing more. One platform, two instruments, the same calibration standard.

WEATHER

Wind speed and direction,
temperature, humidity, pressure.
Five reading screens.

SPORTS

Wind speed and direction only.
The same ultrasonic head, a
simpler instrument.



CALYPSO
instruments

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Why HANDHELD WEATHER Should Win the DAME

01

A Genuine First

The first compact handheld to combine ultrasonic wind speed and direction with temperature, humidity and pressure.

02

Retiring a Category

Not a refinement of the spinning cup-and-vane anemometer — a replacement for it, and for the second instrument in the bag.

03

Field-Ready by Design

Color display, physical keypad, IP66 housing and a wrist lanyard, at 180 g — built for one-handed use in real conditions.

04

Open by Choice

Open-source hardware and BLE connectivity welcome any partner platform — chartplotters, apps, drone systems — without lock-in.

**We believe HANDHELD WEATHER earns
recognition not for refining an old idea,
but for retiring one.**

