



# CALYPSO WEATHERDOT

Temperature, Humidity & Pressure Sensor

User manual



English version 1.0  
01.11.2023



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# 1 Product overview

The Weatherdot is a mini, compact and light-weight weather station that provides users with temperature, humidity and pressure and sends the data to the free Anemotracker App for viewing and for logging data.



## 2 Package content

The package contains the following:

- One Weatherdot.
- Wireless charging Qi plus USB cable.
- Serial number reference in the bottom of the packaging.
- A quick user guide on the back of the packaging and some more useful information for the customer.

## 3 Technical specifications

The Weatherdot has the following technical specifications:

### Dimensions

- Diameter: 43 mm, 1.65 in.

### Weight

- 40 grams, 1.41 oz.

### Bluetooth

- Version: 5.1 or beyond
- Range: up to 50 m, 164 ft or 55 yds (open space without electromagnetic noise)

The Weatherdot uses Bluetooth Low Energy technology (BLE).

BLE is the first open wireless communication technology that communicates between mobile devices or computers and other smaller devices such as our new wind meter.

Compared to Classic Bluetooth, BLE provides considerably reduced power consumption and cost while maintaining a similar communication range.

### **Bluetooth Version**

The Weatherdot uses the latest BLE version which is 5.1. BLE facilitates the reconnection between devices when they leave and re-enter the bluetooth range.

### **Compatible devices**

You can use our product with the following devices:

- Compatible Bluetooth 5.1 Android devices or beyond
- iPhone 4S or beyond
- iPad 3rd generation or beyond

### **Bluetooth Range**

The coverage range is 50 meters when in an open space free of electromagnetic noise.

#### **Power**

- Battery-powered
- Battery life
  - 720 hours with full charge
  - 1,500 hours on standby (advertising)
- Wireless : charging QI

### **How to Charge the Weatherdot**

The Weatherdot is charged by placing the unit on the base of the wireless charger upside down as shown in the photo. The base with the tripod screw and the lanyard should be facing up.

The average charging time for the Weatherdot is 1-2 hours. It should not be charged more than 4 hours at a time.

## Sensors

- BME280
- NTCLE350E4103FHBO

The sensors of the Weatherdot measure temperature, humidity and pressure.

## Data Given

- **Temperature**
  - Precision:  $\pm 0.5^{\circ}\text{C}$
  - Range:  $-15^{\circ}\text{C}$  to  $60^{\circ}\text{C}$  or  $5^{\circ}$  to  $140^{\circ}\text{F}$
  - Resolution:  $0.1^{\circ}\text{C}$
- **Humidity**
  - Precision:  $\pm 3.5\%$
  - Range: 20 to 80%
  - Resolution: 1%
- **Pressure**
  - Precision: 1hPa
  - Range: 500 to 1200hPa
  - Resolution: 1 hPa

Temperature is given in Celsius, Farenheit or Kelvin.

Humidity is given in percentage.

Pressure is given in hPa (hectoPascal), inHG (inches of mercury), mmHG (millimetres of mercury), kPA (kiloPascaul), atm (standard atmosphere).

## Protection Grade

- IP65

The Weatherdot has a protection grade of IP65 . This means the product is protected against dust and low levels of jets of water from different directions.

## Easy Mount

- Tripod mount (tripod thread (UNC1/4"-20))

The Weatherdot has a tripod thread for easy mounting to a tripod mount. A screw comes with the package that can be used to be attached to the Weatherdot and to any other item that has a tripod thread.

## Calibration

The Weatherdot has been calibrated with accuracy, following the same calibration standards for each unit.

# 4. How to Use

## 1. Charge your Weatherdot before use.

- A. Place the unit on the base of the wireless charger upside down as shown in the photo.
- B. The base with the tripod screw and the lanyard should be facing up.
- C. The Weatherdot will be fully charged within 1-2 hours depending on the level of battery before charge.

## 2. Install the Anemotracker App

- A. Make sure your device has an active Bluetooth connection. The Weatherdot works with Android 4.3 and beyond or iOS devices (4s, iPad 2 or beyond).
- B. Download and install the Anemotracker App from Google Play or the Apple Store.



- C. Once the App is installed start it and open the settings menu by sliding the screen to the right.
- D. Press the "Pair Weatherdot" button and all Weatherdot devices within range will show up at screen.
- E. Select your device and connect. Your device is the one that corresponds with the MAC number on your Weatherdot box

## 3. Spin the Weatherdot in a circle for 80 seconds.

- A. To obtain Temperature, Pressure and Humidity, spin the Weatherdot by its lanyard around in a full circle during 80 seconds making sure to keep a firm grip on the lanyard at all times.

## 5. Troubleshooting

### Troubleshooting Bluetooth connection

Your device is compatible but you can not connect?

1. Make sure BT (Bluetooth) mode is running on your smartphone, Tablet or PC.
2. Make sure the Weatherdot is not on Off mode. It is in Off mode when the unit does not have sufficient battery level.
3. Make sure no other device is linked to your Weatherdot.

Each unit can only be connected to a single device at a time. As soon as it gets disconnected, the Weatherdot is ready to link to any other device with the Anemotracker app installed and actively searching for available Weatherdots to connect to.

### Troubleshooting Sensor Accuracy

If the Weatherdot is not spun, it will still give temperature, pressure and humidity, but it will not be as accurate.

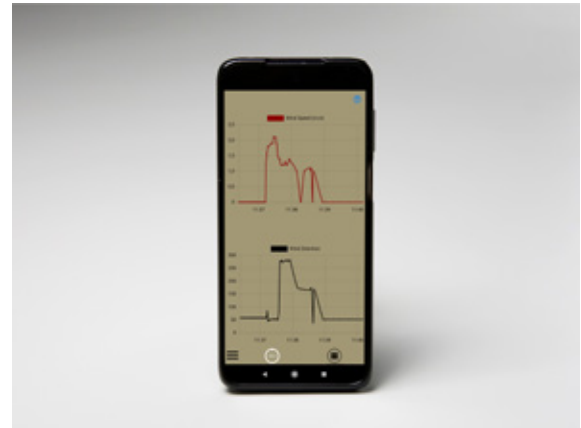
1. Please make sure to spin the Weatherdot for 80 seconds.
2. Make sure no debris is around or near the sensors.

If the problem persists, please contact Calypso Technical Support at [aftersales@calypsoinstruments.com](mailto:aftersales@calypsoinstruments.com).



## 6. Anemotracker App

The Weatherdot ballistics display mode is designed to be used with the Anemotracker App where you can get the Weatherdot data and log the data for future viewing.



For more information about Anemotracker App, and all that it offers, please see the latest app manual on our website.

## 7. Developers

Our hardware firm is dedicated to open-source principles. While specializing in hardware development, we've also created and maintain the Anemotracker App, designed to enhance the use of our products. Recognizing the diverse needs of our users, we understand that customized solutions are often required beyond our initial vision. That's precisely why, right from the start, we made the decision to open our hardware to the global community.

We wholeheartedly welcome third-party software and hardware companies to seamlessly integrate our products into their platforms. We've provided the resources you need to connect to our hardware, allowing you to effortlessly replicate the product's signals.

To assist you in connecting with our hardware, we've compiled a comprehensive Developer Instruction Manual for the Weatherdot, available at [www.calypsoinstruments.com](http://www.calypsoinstruments.com).

While we've aimed to make the integration process as straightforward as possible, we understand that questions may arise. If you require any assistance, please don't hesitate to reach out to us. You can contact us via email at [info@calypsoinstruments.com](mailto:info@calypsoinstruments.com) or by phone at +34 876 454 853 (Europe & Asia) or +1 786 321 9886 (Americas).

## 8. General information

### Maintenance and repair

The Weatherdot does not require great maintenance thanks to its streamlined design.

Important aspects:

- Do not attempt to access the sensors area with your fingers.
- Do not attempt any modification to the unit.
- Never paint any part of the unit or alter its surface in any way.

If you have any questions or doubts, please contact us directly.

### Warranty Policy

This Warranty covers defects resulting from faulty parts, materials, and manufacturing, provided such defects become apparent within 24 months following the purchase date.

The Warranty becomes void if the product is used, repaired, or maintained in a manner not in accordance with the provided instructions and without written authorization.

This product is intended solely for leisure purposes. Calypso Instruments will not be held responsible for any misuse by the user, and as such, any damage caused to the Weatherdot due to user error will not be covered by this guarantee. The use of assembly components different from those originally provided with the product will nullify the warranty.

Alterations to the positions or alignments of sensors will render the warranty void.

For additional information, please reach out to Calypso Technical Support at [aftersales@calypsoinstruments.com](mailto:aftersales@calypsoinstruments.com) or visit our website at [www.calypsoinstruments.com](http://www.calypsoinstruments.com).



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