

BaroVUE™ 10

Digital Barometer



Revision: 08/2021
CSL I.D - 1371

Info
Link



www.campbellsci.eu/barovue10

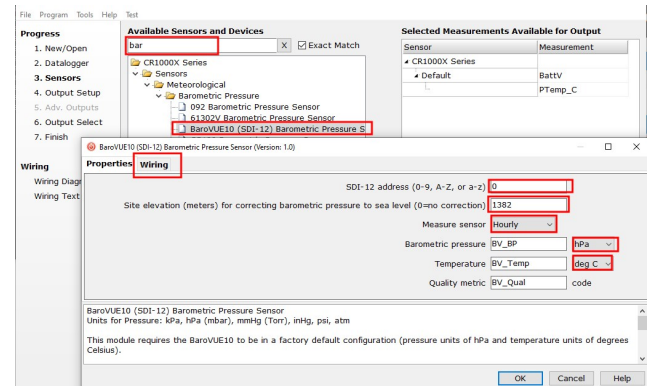
1. Introduction

This Quick Deploy Guide provides an overview of the steps used to install and measure the BaroVUE 10 using SDI-12. The product manual is the definitive source for detailed installation instructions and information. The manual is available at: www.campbellsci.eu/barovue10

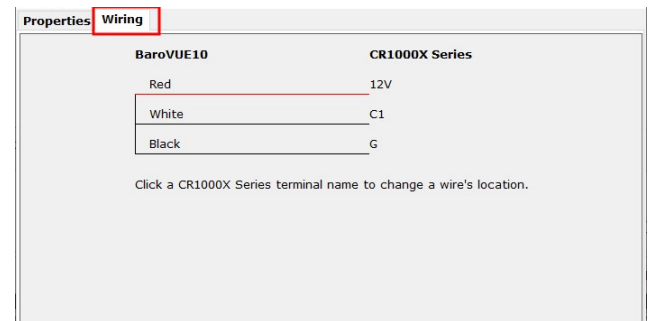
2. Program sensor

1. Connect the data logger to the computer.
2. Open **Short Cut** and click **Create New Program**.
3. Double-click the data logger model.

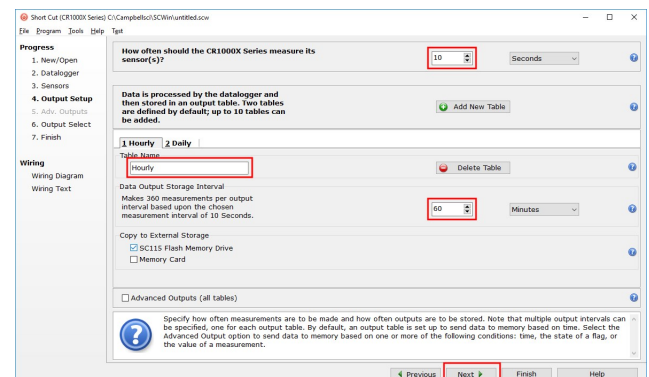
4. In the **Available Sensors and Devices** box, type BaroVUE10 or find the sensor in the **Sensors** > **Meteorological** > **Barometric Pressure** folder, and double-click **BaroVUE10 (SDI-12) Barometric Pressure Sensor**. **SDI-12 Address** defaults to 0. Enter the correct **SDI-12 Address** for the sensor if it has been changed from the factory default value. Type the elevation in metres. Choose whether to measure the sensor every hour or every scan. The **Barometric pressure** and **Temperature** default to **hPa** and **deg C**, respectively. These can be changed by clicking the **Barometric pressure** or **Temperature** box and selecting another option.



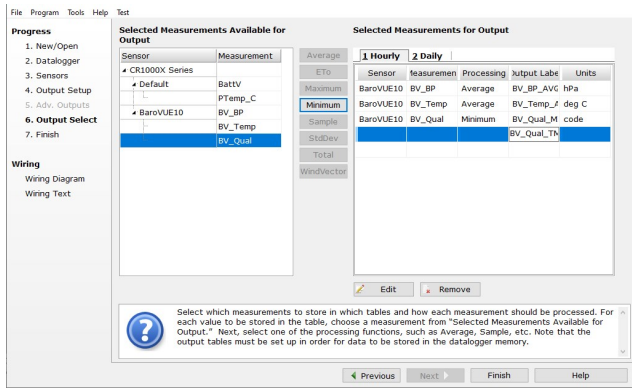
5. Click the **Wiring** tab to see how the sensor is to be wired to the data logger. The default control terminal for SDI-12 is **C1**. To change to another terminal, click the terminal name and select another terminal. Click **OK** after wiring the sensor.



6. In **Output Setup**, type the scan rate, a **Table Name**, and **Data Output Storage Interval**. Click **Next**.



7. Select the output options.



- Click **Finish** and save the program. Send the program to the data logger.

3. Calibration sheet

NOTE:

The calibration sheet supplied with the BaroVUE 10 applies to the sensor card (BVC10). The serial number on the outside of the unit refers to the serial number of the BaroVUE 10 Main Board. To confirm you have the correct calibration sheet, open the device and check the serial number on the BVC10 sensor card.

Motherboard Serial Number



Sensor Card Serial Number



4. Test sensor

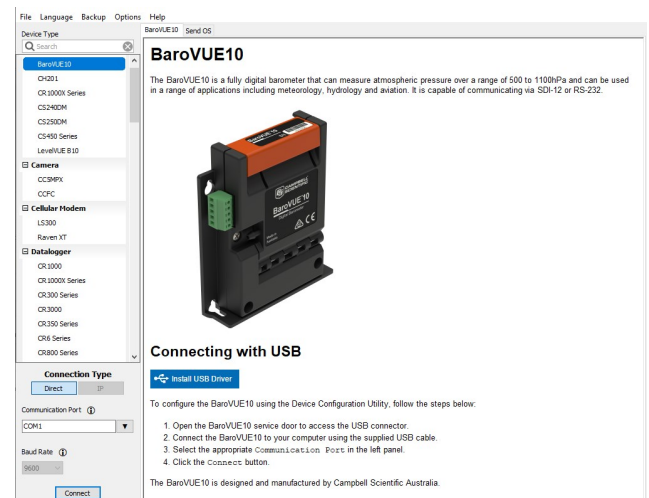
Verify sensor operation in the lab or office before installing in the field using the **Device Configuration Utility** software available as a download on www.campbellsci.eu. It is included in installations of **LoggerNet**, **RTDAQ**, and **PC400** software.

- Open the main case by unclipping the latch and opening the main door.



FIGURE 4-1. BaroVUE 10 with main door open

- Open **Device Configuration Utility**.
- Type BaroVUE 10 in the **Device Type** box and click BaroVUE 10.

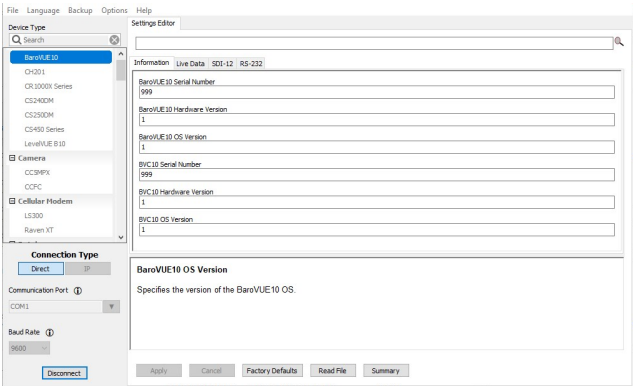


4. If this is the first time connecting the BaroVUE 10 to the computer, click **Install USBDriver before** connecting the cable to the computer.
5. Use the USB cable to connect the BaroVUE 10 USB port to a computer USB port. See [FIGURE 4-1](#).
6. Select the **Communication Port** in the left panel. **BaroVUE10** will appear in the selection dialogue.

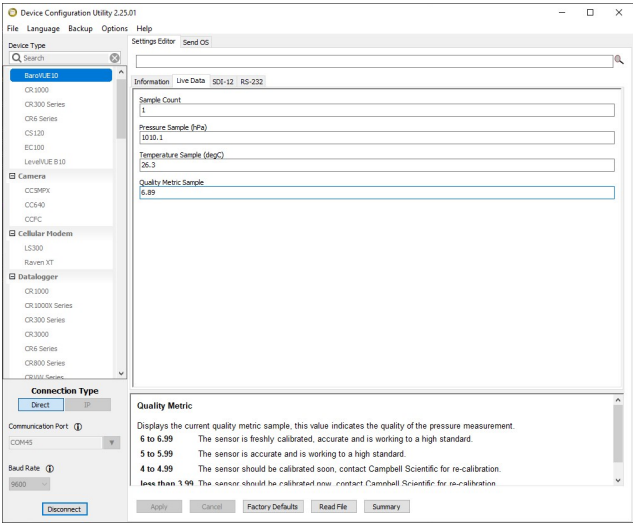
NOTE:

It may take a few seconds for the **Communication Port** to become available for use after physically connecting the BaroVUE 10 to the computer. If you don't see a BaroVUE 10 device listed, check that the USB cable is correctly inserted and that the USB driver was installed in step 4.

7. Click **Connect** to access the **Settings Editor**.



8. Click the **Live Data** tab to view real-time measurements. The Quality Metric Sample value should be greater than 5.



WARNING:

Remove the USB cable before closing the door.

5. Wire functions and connections

Connect the wires in the order shown in the following table.

Table 5-1: Wire colour, function, and data logger connection		
Wire colour	Wire function	Data logger connection
White	SDI-12 signal	C, SDI-12, or U configured for SDI-12 ¹
Red	Power	12V, Battery+
Black	Power ground	G
Blue	RS-232 TX	not connected
Yellow	RS-232 RX	not connected

¹U and C terminals are automatically configured by the measurement instruction.

6. Mounting

CAUTION:

To prevent condensation, install the sensor in an environmentally protected enclosure, complete with desiccant. Change the desiccant at regular intervals.

The BaroVUE 10 is typically mounted in a Campbell Scientific enclosure next to the data logger. Secure the BaroVUE 10 to an enclosure backplate by inserting screws through the mounting holes in the BaroVUE 10 and into the grommets. The enclosure must include desiccant and a desiccant indicator card.

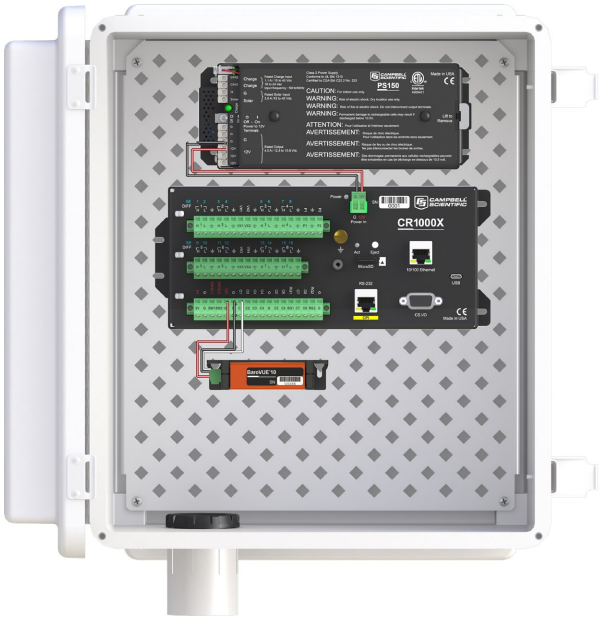


FIGURE 6-1. BaroVUE 10 mounted in a Campbell Scientific enclosure