BRS

BQC REDOX SYSTEM

BRS QUICK USER GUIDE

TEST STRIPS USER GUIDE

support@bqcredox.com

www.bioquochem.com

BQC REDOX TECHNOLOGIES

BRS (BQC Redox System) is the first portable electrochemical Device designed to measure the Total Antioxidant Capacity (TAC) of a wide variety of samples in a simple, fast and precise way.

BRS device works exclusively with **BRS App (Android and Windows)**

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GETTING TO KNOW YOUR BRS DEVICE

BRS DEVICE CONTENT. Check your BRS Carrying Case to make sure that it contains all the items listed below:

- BRS Device (protected with a rubber sleeve).
- BRS Test Cell.
- USB Cable.
- USB Pen Drive (Instructions Manual).

If any of these items are missing, please contact us at support@bqcredox.com

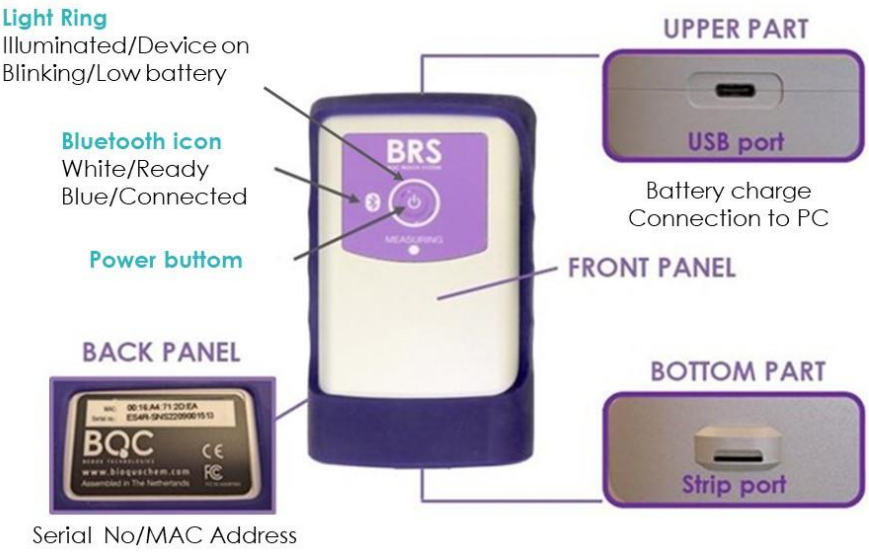
BRS ACCESSORIES (not included).

- BRS Disposable Strips.
- BRS Electrolyte and BRS Standards.
- Power adaptor.

BRS App. **Registration on the BRS platform** is required before using the **BRS App** for the first time. Use the link sent to you via email to register on this platform. Registration can be completed on any device (computer, phone, tablet).

Install the **BRS Android App** on your Android device.
Install the **BRS Windows App** on your Windows PC.

BRS DEVICE DESCRIPTION



HOW TO USE THE BRS DEVICE

Before performing a test, check that the following items are ready:

- BRS Device and BRS Test Strips.
- BRS App: Android Device/ Windows PC.
- BIO: Standards and Samples.
- AGRI-FOOD: BRS Electrolyte, Standards, Blank and Samples.

1. Open the **BRS App** on your Windows PC or Android device and **Login** with your credentials. **Internet connection** is required for login. Then, BRS Apps work both **online and offline**.

2. **Connect** your BRS device with the **Windows PC** via an **USB** port or make sure that **Bluetooth** is activated on your **Android device**.

3. **Switch ON** the device by pressing the **Power button**. The ring around the button illuminates.

4. **Pair** the **BRS Device** with the **BRS App** by clicking **Search devices**. **Choose** the corresponding identifier and **click connect**:

BRS Windows App. EmStatGo-X.

BRS Android App. BQC-XXXX (XXXX/MAC address).
Bluetooth icon blue → Device connected

5. **Select** the **Sector** and the **Type of Sample** on the App.
BIO. Samples can be measured directly.
AGRI-FOOD. Mix the sample with BRS Electrolyte (1:1v/v is recommended).

6. **Insert** a **BRS Test Strip** (printed side "BQC TAC" facing up) into the strip port of the BRS Device.

7. Place a **drop** of sample/blank (depending on the type of measurement to be performed, see **8**) onto the strip. The drop (50 -100 µL) **must cover completely** the sample area of the strip.

Important tips for a correct TAC measurement

- BRS strips are single-use.
- Drop sizes between 50-100 µL are recommended (< 50 µL could get incorrect readings).
- Do not measure a strip without sample. The strip will be useless.

8. **Select TAC and START** the measurement. **Two options** are possible:

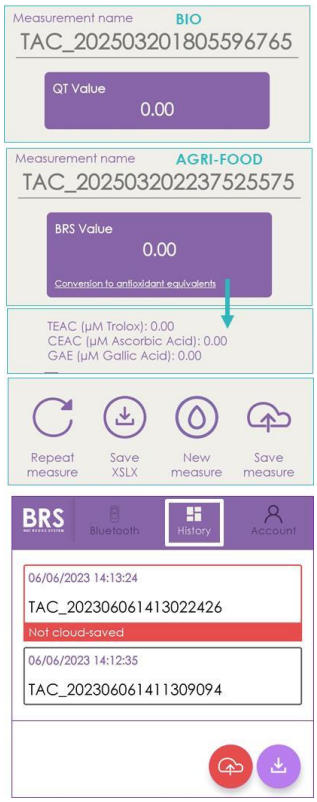
Measure sample blank. Choose this option to work with **blank correction**.

i. Place the blank sample onto the strip and click "Measure sample blank". When the blank measurement is finished (< 1 min), "START" will be displayed on the screen. **Blank sample value will not be displayed on the screen**.

ii. Insert a new strip, place the sample onto it and click "START". Wait for the results (< 1 min). **Blank sample value is automatically subtracted from the sample reading**.

Skip sample blank. Choose this option to measure samples **without blank correction**. Place the sample onto a new strip and click "START". Wait for the results (< 1 min).

Do not remove the strip until the measurement is finished.



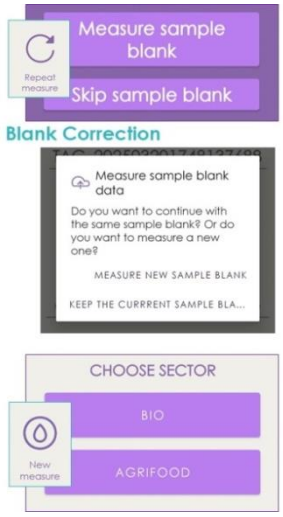
9. Once the measurement is finished, the **results screen** will be displayed. **TAC** values are expressed in terms of:

BIO - Electric charge Q (µC).

AGRI-FOOD - BRS Value/ Antioxidant Equivalents (Trolox, Ascorbic Acid or Gallic Acid).

From results screen, the **data** can be **saved in the cloud, downloaded or shared**. All of your records will be stored on the **History tab.**

If you are working **offline** the data will be locally saved on your Android device/Windows PC. Offline measurements will appear on the measurement history labelled in red. Click on the cloud upload symbol to storage your results in the cloud when you have access to internet.



10. If you want to perform a **new measurement,** insert a **new strip** and select:

Repeat measurement, to continue measuring the **same type of sample**.
If you are working with **blank correction**, a message asking if you want to continue the measurements with the same blank or measure a new one sample will be displayed on the screen.

New measurement, to measure a **different type of sample.**

- Check the complete **Instructions Manual** for more tips and detailed information.
- Use the **BRS Test Cell** to check the performance of the BRS Device if you have unexpected results.
- Handle the **BRS Device** with care. **Do not allow** liquids to spill into the device.
- Contact **support@bqcredox.com** if you need technical assistance.