BRS

BQC REDOX SYSTEM

BRS SENSOR USER GUIDE

Oil samples analysis

support@bqcredox.com

www.bioquochem.com

BQC REDOX TECHNOLOGIES

The BRS Sensor is the first electrochemical device specifically developed to evaluate the Total Antioxidant Capacity (TAC) in oil samples—quickly and reliably, following a simple pretreatment

BRS SENSOR works exclusively with **BRS Windows App**

GETTING TO KNOW YOUR BRS SENSOR

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

- BRS Device (protected with a rubber sleeve).
- USB Cable.
- USB Pen Drive.
- BRS Sensor Unit (measuring probe).

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

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. Install the **BRS Windows App** on your Windows PC. BRS Sensor works exclusevily with BRS Windows App.

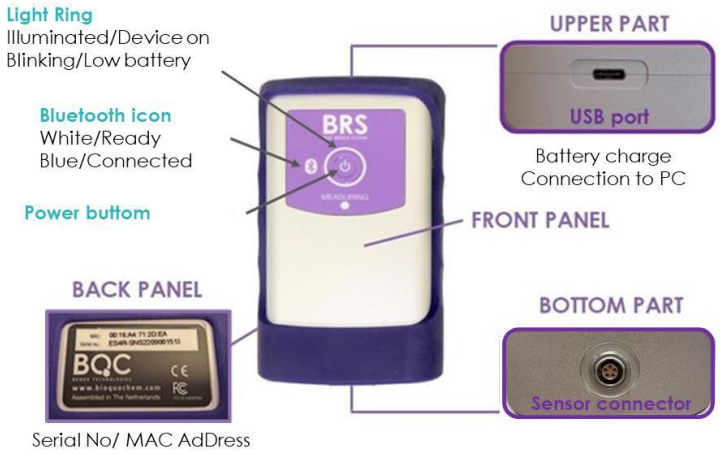
BRS SENSOR ACCESSORIES (not included)

- BRS Oil Scan Solution and BRS Oil Clean Solution.
- BRS Sensor Standards (Tocopherol).

MATERIAL NOT SUPPLIED

- Power adaptor
- Support stand with rod and bench clamp for sensor holding.
- Conical centrifuge tubes and glass beakers (25 mL, 50x34 mm).
- Vortex, Pasteur pipets and Water for rinsing.

BRS SENSOR DESCRIPTION



HOW TO USE THE BRS SENSOR DEVICE

TAC OILS

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

- BRSDevice, BRS Sensor Unit and BRS Windows App.
- BRS Oil Scan Solution, BRS Oil Clean Solution, standard and samples.
- Support stand with rod and bench clamp for sensor holding.
- Conical centrifuge tubes and glass beakers (25 mL, 50x34 mm).
- Vortex, Pasteur pipets and Water for rinsing.

Sample Pretreatment

- Mix 4 g of the sample with 4 mL of BRS Oil Scan Solution.
- Vortex 1 min at 3000 rpm.
- Wait until two phases are observed (15 min).
- Collect the upper phase in the glass beaker for the analysis.

BRS Measurement

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

2. Connect your BRS device with the **Windows PC** via an **USB** port.

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** (EmStatGo-X).

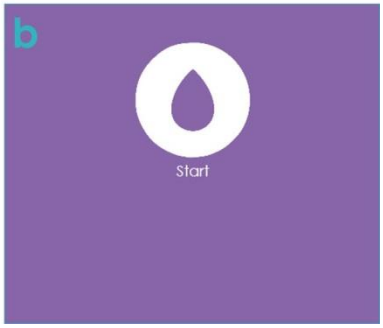
5. Select BRS Sensor on the App.

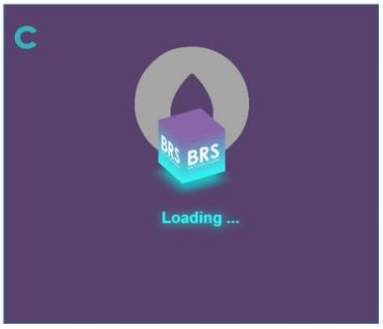
6. Select Oils on the App.

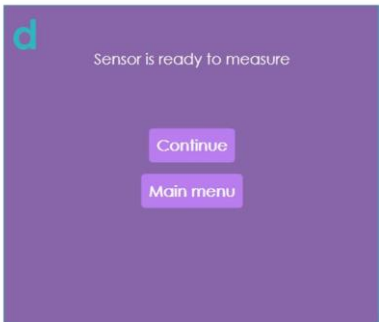
7. Select TAC on the App.

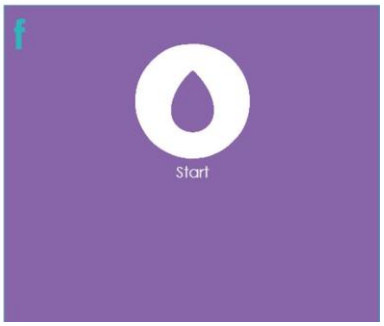
8. Follow the indications on the App to perform a measurement:

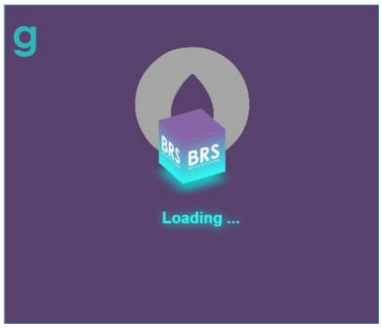
- Insert the BRS Sensor Unit into the BRS Oil Clean Solution and START the cleaning step **(a-d).**
- Insert the BRS Sensor Unit into the sample (upper phase after pretreatment) and START the measurement **(e-h).**





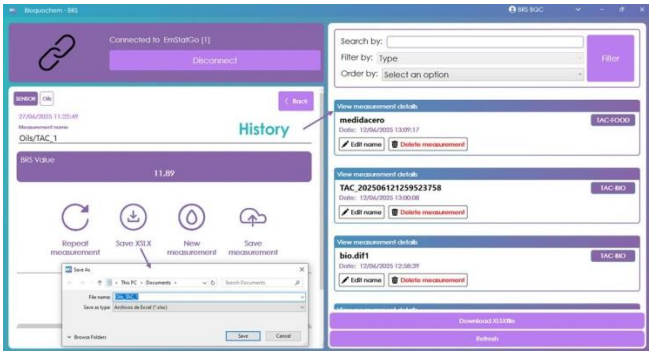




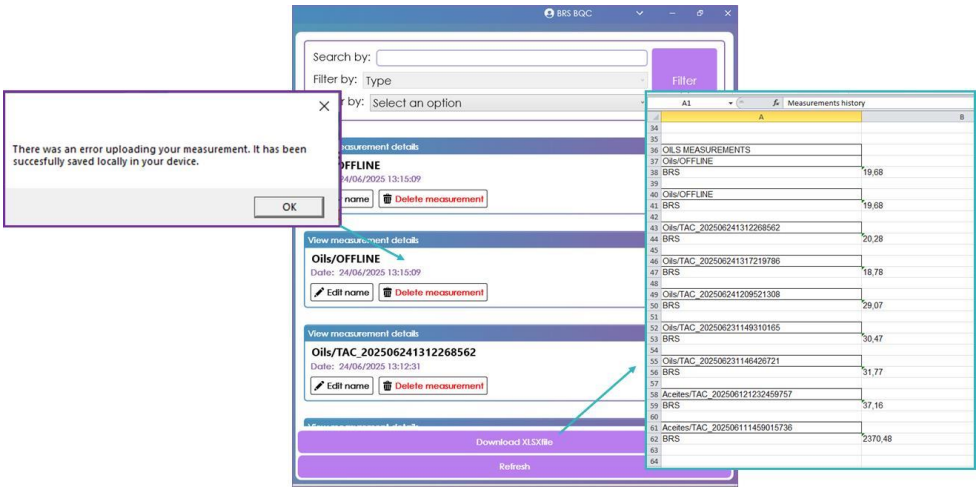


Important tips for a correct TAC measurement

- Make sure that the sensor end is completely immersed into the solution.
- Pay attention to avoid bubbles on the sensor surface when it is immersed into a solution.



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



10. If you are working **offline** the data will be locally saved on your Windows PC. Offline measurements will appear on the measurement history when you have access to internet.

11. If you want to perform a **new measurement,** rinse the sensor with water, dry it a cloth, click **Repeat Measurement** and follow the steps indicated in **Section 8**.

12. If no further measurements are needed, clean the sensor with the **BRS Oil Clean Solution** (Section 8, **a-d**), rinse it with water and dry it.

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