TEMBO Africa

Transformative Environmental Monitoring to Boost Observations in Africa

Camera-based discharge monitoring

Overview

TEMBO Africa offers real-time water level and discharge data in rivers and canals, using a camera taking videos at regular intervals. For river up to 50 meters, a small camera system, the "PtBox" is available and can be paired with one of the following software:
1. DischargeKeeper Light, using the proprietary and patented SSIV software, with a Maintenance and Support from SEBA Hydrometrie.
2. OpenRiverCam, a fully scalable open-source solution with a local Maintenance and Support contract with our local vendors.
For wider rivers, a larger system, the DischargeKeeper is, is available from SEBA Hydrometrie.

Where?

Ghana - contact: TAHMO Ghana
Kenya - contact: TAHMO Kenya
Zambia - contact Local Devices Technologies Zambia Ltd.

For whom?

Ideal for organizations seeking to provide flood early warnings, enhance situational awareness, and monitor dam inflows/outflows and irrigation schemes.

Monitoring made smarter and safer

👷 **Non-contact** discharge monitoring, avoiding dangerous and labour-intensive methods.

🌊 **Real discharge** measurements rather than water level estimates, extremely useful for e.g. short-term flood forecasting.

⚙️ **Flexible installation** on riverbanks, suitable for various locations 💸 **Affordability** and **scalability**.
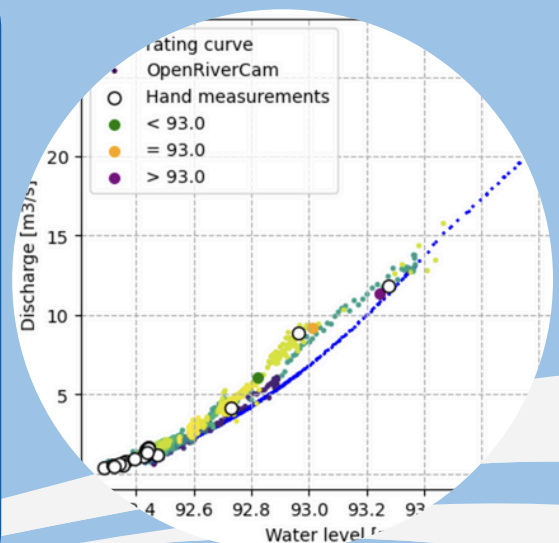
🔧 **Low complexity** hardware, with easy to replace parts and little maintenance.

👷 **Easy installation** by a hired professional or the user.
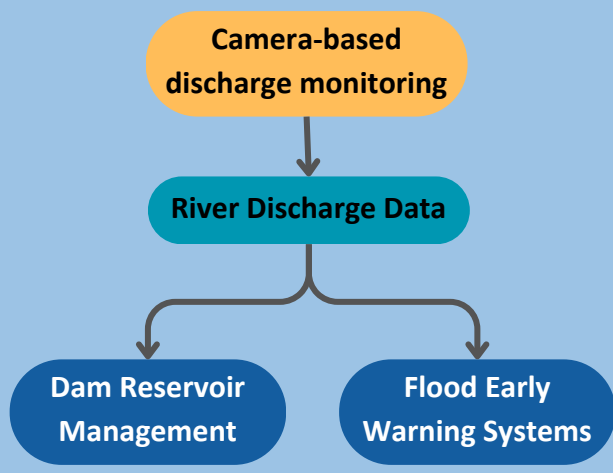
⚙️ **No limitation on the water depth**.

🌐 **Multiple software hosting options**: international, local, or on-premise.

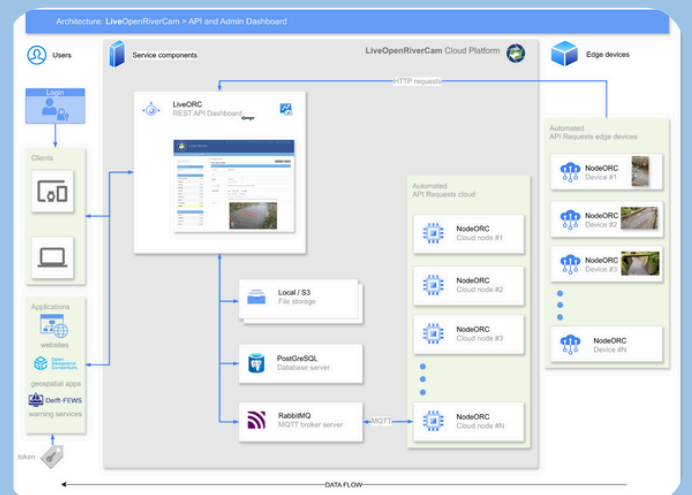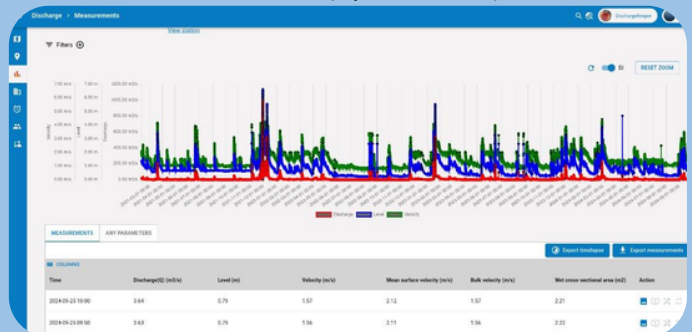🌐 **Web-based platform** and **API** for data retrieval and integration.

A **sensors** solution, that supports one of the TEMBO **products**, while can be leveraged by two **services** thanks to a "Lego®-ised" approach!

Camera-based discharge monitoring

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River Discharge Data

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Dam Reservoir Management   **Flood Early Warning Systems**

Your Sensor: PtBox, a Raspberry Pi-based system that records, processes and transmits videos, water level and discharge

Your Data: Time series views, downloads or scripted access through the Discharge App (proprietary) or LiveORC API (open-source).

How it works

Find a suitable site

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Set up a mast and power supply

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Install our camera system

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Measure some coordinates on both banks and a bottom profile

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Calibrate the camera with on-board OpenRiverCam (open-source) or SSIV (proprietary) software

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Check if everything works and enjoy your data on dashboard or through scripting. **In-country specialists can assist with installation, operation and maintenance.**

Partners involved in Camera-based discharge monitoring

RAINBOW SENSING   SEBA HYDROMETRIE

Contact us and learn more!

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