

**KEY BENEFITS**

- Secure updates to the IOT device on the boat assured
- Support the Linux environment and selected board
- Allows the company to scale as the fleet of devices grows

**WHY MENDER**

- Closest to the way the company envisaged updating would work
- Price tag was good
- Documentation allowed the developers to set it up within 2 days

**“Boats do not have constant GSM coverage, and Mender allows us to automatically update our core software when a boat reaches GSM coverage”**

**Géza Kovacs,**

Project Manager, Airmoniq

**Company Biography**

The Airmoniq IOT device has been developed by Arteries. The company is based in Budapest, Hungary. Mender provides the over-the-air system and component updates for the C embedded program and the java-based program within the device.

**Challenge**

Up to this point, only the big sailing teams like the ones who race in the America's Cup could afford an in-boat performance system that would use IoT sensors and overlay data analysis to generate recommendations to help boost racing performance.

**Solution**

The Airmoniq IoT device with system and component updates provided by Mender provides a performance measurement capability for professional sailors with mid-sized boats that has previously only been accessible to elite sailing teams.

20 Hungarian sailing teams are now using the Airmoniq product on their boats. The product consists of an onboard IoT device which collects the sensor data, and a software application that makes some smart suggestions to help support decision making. These decisions include for example, when should the sailor turn the boat, or change the sail. GPS, wind measurement, depth of the lake, wave detection and a vision system that tracks the crew members and the position of the 5 to 10 sails and the dynamic changes - are all measured by the product.

The product is helping make better decisions based on the history of data that is collected.

The IoT device has a SIM and Wifi connection, and works with a Canvas network that connects the boat from its hard to reach location in the middle of Lake Balaton, for instance. The IoT device is fitted to the boat and there are applications for phone, tablet, watch and device so that the insights from the data can be flowed to the individual crew members on board. All collected data is uploaded to the cloud and analysis is done for decision making.

The own developed motherboard integrating several chips and mini-computer (RPI) and Géza says “this board is capable of doing all the measurements we need to do and strong enough for the current needs.” The company has intentions to upgrade to an industrial board as they scale. The OS is Linux-based, and the internal chip is running C and a java-based language on top of this.

**Benefits**

Mender ensures even in the hard to reach environment of a lake, the device still receives secure code-signed updates. Géza explains with pride: “The top sailing teams in Hungary are now using this product. In fact, the first and second placed sailing teams in Hungary’s premier sailing competition The Blue Ribbon now use the Airmoniq device.”

Learn more at [Airmoniq.com](https://airmoniq.com)

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