

FAQ - Lobaró Platform

Why is the Lobaró Platform mandatory for our NB-IoT Sensors & Gateways?

This question sometimes arises from integrators who run their own type of IoT platform tailored to a particular use-case and don't want an intermediate between their system and the IoT hardware to integrate. In contrast to this our platform is primarily considered for device management of Lobaró and 3rd party sensors and gateways. It's meant as secure, stable and scalable abstraction layer to the actual hardware complexity and gives the following benefits to the integrator or end-user:

- **Encrypted data transfers using UDP and NB-IoT**, client and server certificate-based, using DTLS, while still being able to use battery life friendly UDP transfers with little overhead.
- Administration of client and server certificates.
- **Remote configuration** of sensors via simple APIs (Web UI, REST).
- Support for **Firmware Updates Over The Air (FOTA)**.
- **Scalability**, even with many thousands of data nodes.
- **Intermediate storage** for sensor data before further processing in the downstream platform.
- **Data insight and export** independent of downstream platform via CSV export or REST API.
- **Integration with LoRaWAN Network Servers** (ChirpStack, TTN / TTI, Lotiot, and many more ...).
- **Unified API for downstream system** across different connectivity technologies on the device side (e.g. NB-IoT, LoRaWAN, wireless MBUS, LAN).
- Quickly bring IoT applications to market by focusing on the use case and the actual data without having to deal with hardware and firmware implementation details or properly secured data transfers from the sensor to the cloud.
- **Low hardware requirements** for the server of the Lobaró Platform. Can run in parallel on a server next to the use-case specific platform or even an Raspberry PI for embedded use-cases.
- Internal APIs between hardware and Lobaró Platform can be changed, e.g. for firmware extensions, without compromising a **stable API to the downstream system** and thus increasing the stability of the end application.

As one might see, all these functionality require a high level of knowledge about the hardware and how it internally works. **Lobaró can only provide support and guarantees that all features of our NB-IoT products are available and function as expected if the Lobaró Platform is also used as a counterpart.**

If using the Lobaró IoT platform is absolutely not an option many of our NB-IoT products can also be configured to use LoRaWAN uplinks which shifts the dependence to the used LoRaWAN network server beside the well-known challenges of LoRaWAN networks compared to cellular IoT.