



MIDOmet
smart metering

MiDoMet NBloT Pulse

*Smart metering via NB-IoT network
easy and reliable*





MiDoMet NBloT Pulse is the specialized NBloT datalogger for monitoring digital inputs. MiDoMet NB-LoT is a self-powered universal device with extensive functionality. Through the digital inputs it can be used to remotely read **impulse meters**, for billing purposes or to monitor the water network. It is equipped with an NB-LoT modem for remote data transfer through open **MQTT** protocols. MiDoMet NBloT is a robust and reliable device and thanks to the **IP68** protection degree it can therefore be installed in any environment. The device can be supplied complete with **SIM and data traffic for 10 years**.

FEATURES

- Up to 4 digital inputs for meters or sensors
- 4G NBloT connectivity
- Resistant to hostile environments with IP68 protection
- Self-powered (more than 10 years of autonomy and replaceable battery)

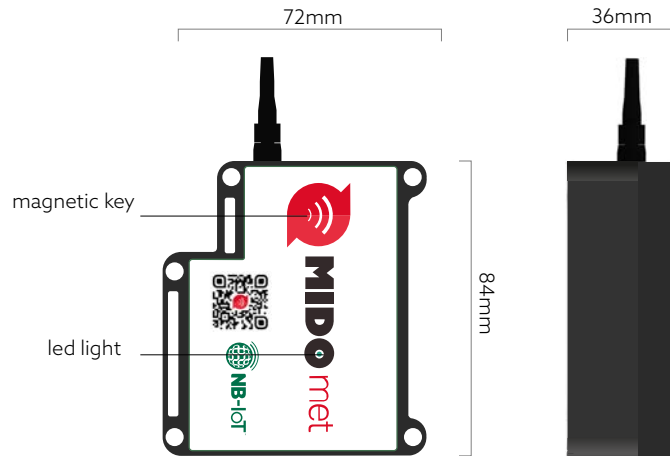
With MiDoMet NBloT it is possible to create an **NBloT fixed network remote reading system**, to remotely read data from digital sensors, overcoming the limits of a concentrator network, and reaching the most remote users, thanks to the use of the 4G NBloT communication network.

The device is supplied **complete with SIM and connectivity** for the entire duration of the service (* Plug & BeFree contract) avoiding to sign agreements with NB-LoT suppliers. The device has **IP68 protection**, and it is therefore possible to install it in hostile environments or even in submersion. However, thanks to the special external case, the **batteries can be replaced**, at the end of their life cycle, without having to replace the entire device.

MiDoMet NBloT Pulse (MD.NB.1.14.2)



INTERFACE AND DIMENSIONS



Guaranteed performances in terms of number and frequency of transmissions

The reading sampling takes place by default every 60 minutes, and every day the 24 readings are sent. This configuration guarantees a battery life that is up to 10 years.

Furthermore, thanks to the bidirectionality of the communication, sampling frequency and data sending frequency can be changed remotely, for example to start sampling campaigns at a higher frequency up to a sample every 5 minutes to analyse one or more defined points.

Storage capacity of the acquired data on the devices

MiDoMet NBIoT is equipped with an internal backup memory capable of retaining:

- the total consumption month by month,
- the hourly details of the readings of the last 31 days,
- the maximum and minimum flow rate of each day.

Furthermore, it is possible to recover data from the memory even if the device is turned off, through the NFC module.

In MiDoMet NBIoT **communication is bidirectional** and allows the device to receive commands and / or configure its parameters remotely (sampling and reading frequencies, parameter configuration). MiDoMet NBIoT is an **open and interoperable device**, data can be easily integrated into third-party or pre-existing information systems, thanks to the standard protocol used: **MQTT**.

Otherwise, the system can be supplied complete with **MiDoMet Soft cloud software**. MiDoMet Soft is a software created for the analysis and management of data relating to smart metering systems, which allows operators a constant analysis of the data, a simple and immediate supervision of the network, as well as being promptly alerted in the event of an alarm exceeding the thresholds.

Device programming and maintenance

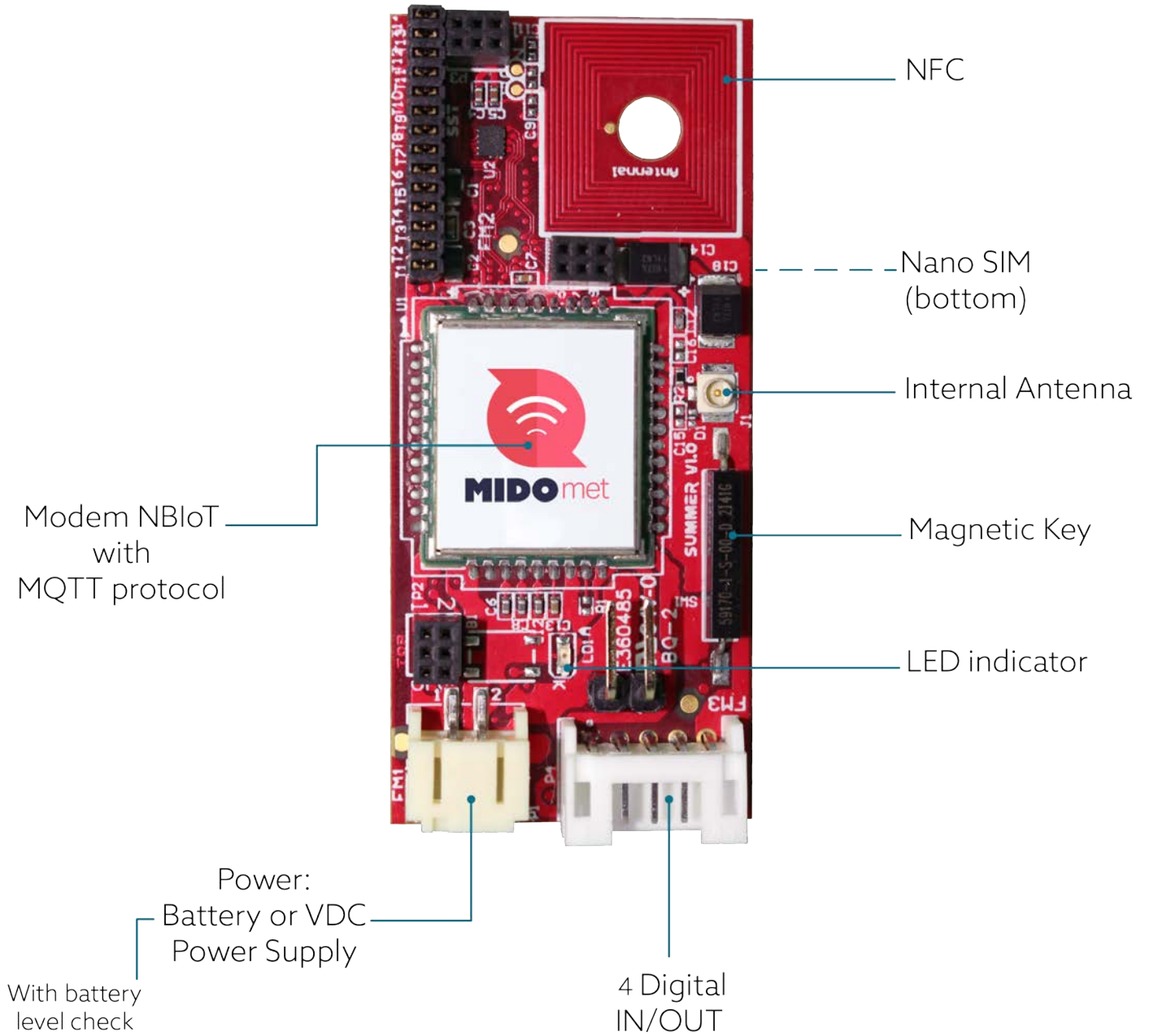
It is possible to access the device locally via the **NFC interface and App** with your smartphone, to view data from the readings of inputs such as: total liters / cubic meters, pressure detected, voltage / internal battery status, etc.

Through the maintenance menu it is possible to carry out various operations: configuring digital inputs, analog inputs and outputs, communicating with servers for sending data, performing NBIoT signal tests.

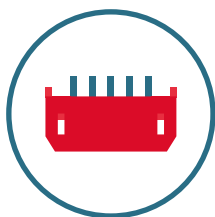
The presence of a led on the membrane allows you to check the status and success of all operations.

In addition, there is a magnetic button, with which it is possible to make instant checks on the device status.





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INPUTS

| | |
|--------------|--|
| INPUTS | 4 IN digital |
| Retrofitting | Can be integrated on previously installed meters |



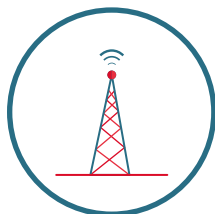
ANALISYS

| | |
|---------|-------------------------------------|
| CPU | Arm® Cortex-M4 32-bit |
| STORAGE | DataFlash 4MByte + 64KBit di Backup |



POWER

| | |
|----------------|---------------------------------|
| BATTERY | Li-SOCL2 3.6V 9000mAh + HPC1520 |
| EXTERNAL POWER | EXT 3-4Vcc (OPT) |



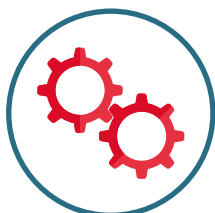
COMMUNICATION

| | |
|--------------------|--|
| NBIoT Modem | SIM7020E NBIoT |
| Supported Protocol | MQTT (COAP-UDP-HTTPS optional) |
| Antenna | Internal antenna Or External one with 3mt cable (optional) |



INTERFACES

| | |
|-----------------|--------------|
| External access | NFC e APP |
| Interaction | Magnetic Key |
| Visual signal | Led Light |



MECHANICAL CHARACTERISTICS

| | |
|-------------------|---------------------------------|
| Assembly | dowels Ø 6 |
| Temperature cond. | Working temperatures:-20/55 C ° |
| Protection Level | IP68 |

