



Remote unit for data collection from different water meters connected in Bus or "point to point" for storage or transmission via LTE Cat M1 / NB-IoT technologies.

Ultra low power consumption with optimized operation mode.

Reliable communications.

Remote configuration and maintenance through the SOCRATES platform.

Capacity for recording and local storage of readings.

Ergonomic, small size, easy installation and start-up.



DATA SHEET

Product Images

Dimensions



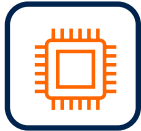
Cable connection LTE Cat M1



Hardware Specifications and Interfaces



4G LTE Connectivity (Cat M1 / NB-IoT)
Fallback 2G



Passive NFC chipset on the front panel, allowing the recording of data and customer-defined parameters for subsequent reading via smartphone



Intelligent self-management mechanisms, data transport error recovery algorithms.



Local/Remote Configuration FOTA remote firmware update Optimized transport algorithms



Intelligent data transport in wireless networks (security and control)



Ultra low power consumption gateway. Internal battery power supply. Efficient energy management that extends battery life.



Secure channel communications. Data encryption and securization.



IP67/IK09 watertight plastic enclosure of small dimensions



Dimensions 86 x 66 x 35 mm



Ergonomic, small dimensions
Fast and user-friendly configuration and start-up

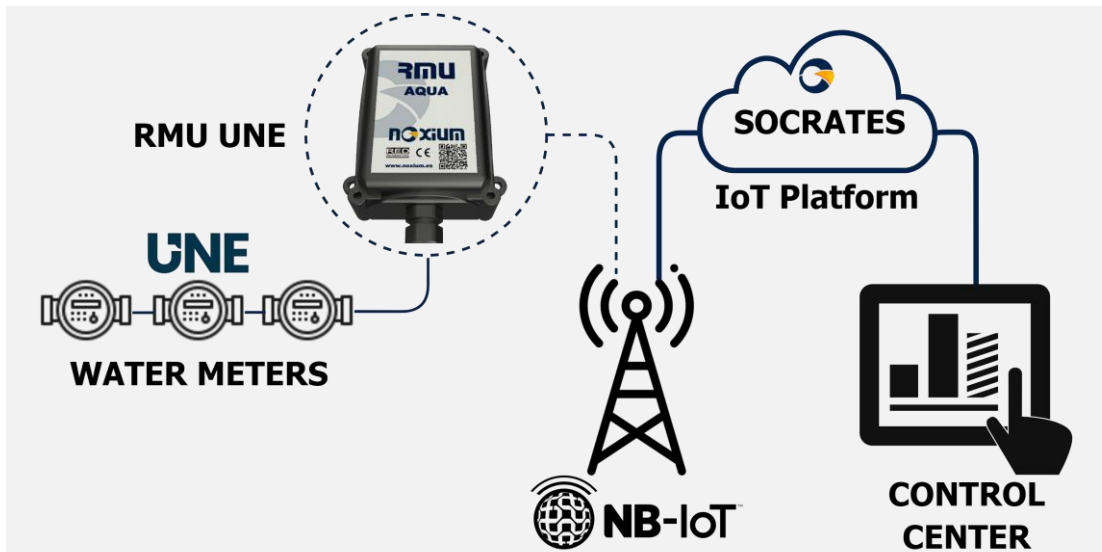


Industrial Working Temperature From -40 to 80°C



Mounting with 3-point wall mounting

Application Example



IoT Sócrates Platform

This platform is in charge of managing the RMU family of devices, as well as managing the data received from them, offering: **Network Monitoring, Device Management and Data Service.**



Socrates Mobile Assistant application

This web application, hereinafter SMA, has a mobile viewer that allows to characterize the suitability of the installations and their locations. It is a key tool in the certification of installations, so that there is a guarantee of proper operation of the installed devices.



Technical Specifications

Wireless Connectivity NB2/ CatM1 / GPRS

| | |
|--------------------|---|
| LTE+ → NB2 + CatM1 | LTE+ NBIoT.2 - data rate (kbps): 32 (DL), 70 (UL) |
| 2G → EDGE + GPRS | LTE+ CatM.1 - data rate (Mbps): 1 (DL), 1 (UL) |
| | 2G EDGE - data rate (kbps): 296 (DL), 236.8 (UL) |
| | 2G GPRS - data rate (kbps): 107 (DL), 85.6 (UL) |

Features

| | |
|--|---|
| External ports and connectors | Exit through cable gland, ensuring watertightness, of 1.5m hose with RJ11 male connector. According to UNE 82326:2010 standard |
| Autonomous battery power supply | Ultra low consumption with internal batteries. Autonomy depending on battery pack (1 and 2-cup options) and usage regime. |
| eSIM Support | Integrated eSIM that enables remote switching of communications carriers as specified in GSMA SGP .02 v3.2 |
| Local bus Reading UNE-82326:2010 | The UNE RMU acts as a SADC as defined in the UNE 82326:2010 standard , capable of executing bus reading cycles and capturing the A/A+, B and C response frames of the meters present on the bus (up to 50 meters). |
| Internal Clock RTC | Real time clock for planning readings |
| FOTA | Socrates platform with remote firmware upgrade functionality of the units |
| Registration Capacity | Internal debug port; internal memory with capacity to temporarily record more than 40,000 A+ frame readings , with behavior according to LIFO/FIFO strategy. |
| Section Configuration | Up to 8 reading sections within a day of operation, configurable by hours and reading periods starting at 5minutes |



Certifications

| | |
|-----------------------|--|
| Security | IEC 62368-1 / EN 62368-1 |
| Requeriments EMC | ETSI EN 301 489-1 V2.2.0 (2017-03) & ETSI EN 301 489-52 V1.1.0 |
| Environmental | IEC 6800xx Frio, Calor y Variaciones (-40 85°C)(*) |
| Degrees of protection | IP 67 IK9 |
| | (*) consult degradations due to use in extreme ranges |

Ordering information

Product Code: RMU UNE– aa – bb

| aa | Wireless connectivity 4G LTE / 2G / NB |
|------|--|
| NB | NB2 multiband |
| NBxx | NB2 band xx |
| QM | LTE-CatM1/2G |
| Q3 | NB/4G catM/fallback 2G |

| bb | Battery Pack Capacity* |
|-----|------------------------|
| 1C3 | 6 Years |
| 2C3 | 12 Years |

* Calculation parameters for one counter, two-way and one-way signal, 1 dispatch per day

Example Product Ordering Code :

| | |
|-----------------------|--|
| RMU UNE NB 1C3 | Industrial Gateway Model UNE Captador – Collector/Gateway with UNE 82326:2010 Bus technology, with NB-IoT multiband communications, battery power supply with 6-year autonomy. IP67 Polycarbonate plastic enclosure. |
|-----------------------|--|

