Wireless Communication Gateway for Flow Meters with UNE82326 Interface

It allows the capture and regular recording of data from devices connected to the meter bus according to UNE standard for subsequent periodic transmission through low latency wireless networks "LPWA".

Ultra low power consumption with optimized operation mode.

Reliability in data acquisition and communication operations.

Remote configuration and maintenance: SOCRATES platform.

High capacity for recording and local storage of readings.

Ergonomic, small size and quick installation.

IoT Measurement and Connectivity

Product Images

Dimensions

62 mm

90 mm

140 mm

Mural Mounting

noxium RMU

RMU CNT NB 2C3

SN: NB-300034-K
IMEI: 864700043974346

CE RoHS RED UP

Typical Connection

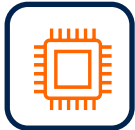| PIN	Señal/Color M12 Hembra
1	Entrada Contador 2
2	Entrada Contador 1
3	Masa de señal (SG)
4	Entrada Digital/Analógica 1
5	Entrada Digital/Analógica 2
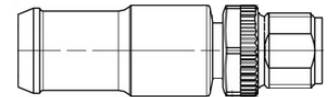
I/O terminal hose 1m

with M12 connector

Hardware Specifications and Interfaces

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

Secure channel communications.Data encryption and securization.

NFC chipset on the front panel, allowing configuration parameters and operating statistics to be obtained locally via smartphone

IP67/IK09 watertight plastic enclosure.

Capture capacity of up to 50 meters with intelligent bus self-management mechanisms.

Dimensions: 140x90x62 mm Weight: 400 gr. (2C3 version)

Local/Remote Configuration FOTA remote firmware update Optimized transport algorithms

High local registration capacity Versatility of configurations Complete operation information

Intelligent data transport in wireless networks (security and control)

Industrial Working Temperature From -40 to 80ºC

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

Ergonomic, easy installation and high installations Mounting with wall or mast mounting

Application Example
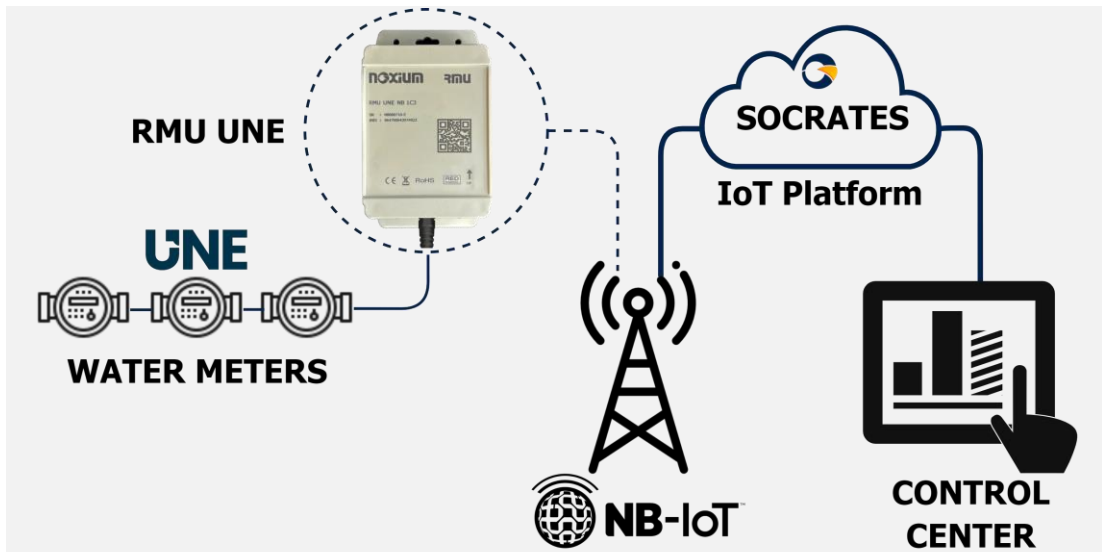
IoT Sócrates Platform

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.
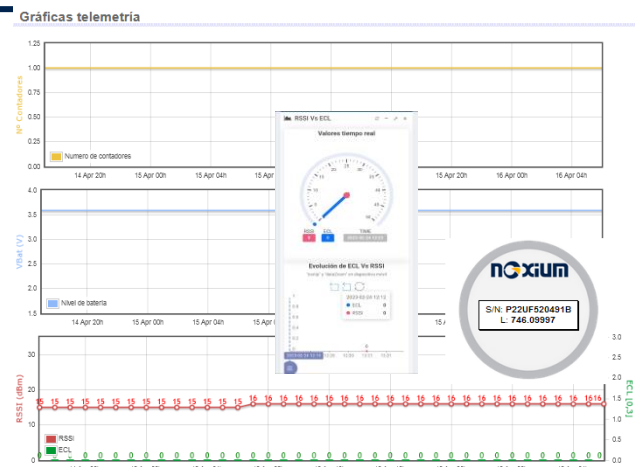
Technical Specifications

Wireless connectivity NB2/ CatM1 / GPRS	
LTE+ → NB2 + CatM1 2G → EDGE + GPRS	LTE+ NBIoT.2 - data rate (kbps): 32 (DL), 70 (UL) 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 85ºC)(*)
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.