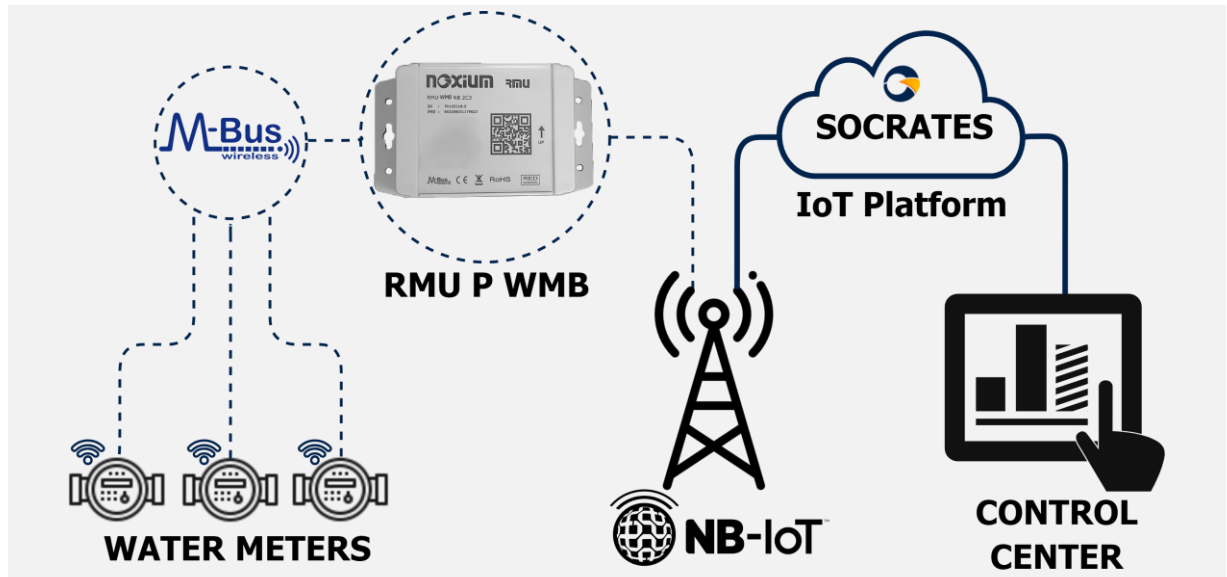# NOXIUM

RMU P WMB

Industrial Gateway

Device data concentrator using Wireless M-Bus protocol through LPWA networks.

Main Features

- Ultra low power consumption with optimized operation mode.
- Reliability in Data Acquisition and Communication Operations.
- Remote Configuration and Maintenance: SOCRATES platform.
- High capacity for logging and local storage of readings.
- Ergonomic, small footprint and quick installation.

Typical Application
Water meter pickup with UNE82326 Interface
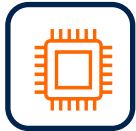

TECHNICAL SPECIFICATIONS

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

Features and benefits	
External ports and connectors	Exit through cable gland, ensuring watertightness, of 1.5m cable with RJ11 male connector. According to **UNE 82326:2010 standard**
Wireless M-Bus EN 13757-4	Configurable frequency band 169/433/868 MHz Typical indoor/urban communication distance > 100m
Batteries	Autonomy according to battery pack (2 options) and usage regime.
eSIM support	Integrated eSIM that enables remote switching of communications carriers as specified in GSMA SGP .02 v3.2
FOTA	**Sócrates Platform** remote firmware upgrade
Energy parameters	The power in receive mode is 100mW . The maximum power in transmission mode is 23dBm. Annual consumption of 8000mAh/year.
Data sending periods	From 24 hours to weekly programming, according to connection schedules.
NFC mobile app	Obtaining configuration parameters and operating statistics

CE RoHS

www.noxium.es

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

Secure channel communications. Data encryption and securization.

NFC chipset, allowing configuration parameters and operating statistics to be obtained locally via smartphone

IP67/IK09 and UL94 HB polycarbonate watertight plastic enclosure with sealed screws.

Intelligent self-management mechanisms, noise filtering and alarm signal processing.

Dimensions: 160x90x62 mm
Weight: 500 gr. (version 2C3)

Wireless M-Bus according EN13757-4
• Error Recovery Band Typical
• Indoor/urban distance > 100m

High local registration capacity
Versatility of configurations
Complete operation information

Intelligent data transport over wireless networks enables remote FOTA firmware update and configuration

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 registration of devices, wall or pole mounting

CERTIFICATIONS

Fields	References
Security	IEC 62368-1 / EN 62368-1
EMC requirements	ETSI EN 301 489-1 V2.2.0 (2017-03) & ETSI EN 301 489-52 V1.1.0
Enviromental	IEC 6800xx Cold, Heat and Variations (-40 a 80ºC)(*)
Degrees of Protection	IP 67 IK9
	(*) consult degradations due to use in extreme ranges

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IoT SOCRATES 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**.

ANDROID NFC Reader: Sócrates Mobile Assistant

This android application, from now 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.

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Dimensions

62 mm
160 mm
90 mm

Wall or pole mounting

ORDERING INFORMATION

Available options:

Option	Connectivity	Option	Battery capacity
NB	NB2 multiband	1C3	6 years
NBxx	NB2 band xx	2C3	12 years
QM	LTE-CatM1/2G		
Q3	NB/4G CatM/fallback 2G		

Active references in production:

RMU P WMB NB 2C3	**Industrial Gateway Model WMB Collector -** Collector/Gateway with Wireless M-Bus technology, NB-IoT multiband for Latin America in IoT Sensors, Model W-Mbus acquisition with 13Ah battery power. Ultra low power consumption. IP67 ABS plastic enclosure.