

# PULSE

## Make all your meters or pulse output equipment communicating



### DEPLOY MORE SIMPLY AND QUICKLY

- Global cellular compatibility (NB-IoT, LTE-M).
- Multi-platform integration facilitated by LwM2M and MQTT standards.
- Automated provisioning on the IoT platform using bootstrapping (LwM2M).
- Mobile application for parameter setting via NFC.
- Universal pulse counter: 2 configurable pulse inputs enabling 1 or 2 meters or pulse output devices (dry contact, REED, S0 relay or open collector) to communicate with each other.

### MEASURE AND ALERT ACCORDING TO YOUR NEEDS

- Reading water and electricity meters: periodic transmission of the index
- Count the number of cycles of a piece of equipment and anticipate its maintenance.
- Trigger an alarm based on configurable high/low thresholds, to quickly detect an anomaly such as a leak or over-consumption.
- Choose your transmission modes: periodic, event-driven, history.

### OPERATE YOUR FLEET OVER THE LONG TERM WITH THE LWM2M

- Standardized and remote device management operations, individually or in batches: commands, configuration read/write, FOTA.



- **Network:** excellent indoor coverage
- **Quick and easy application configuration,** with a smartphone or remotely
- **Local data export via NFC**
- **Battery-operated product**
- **Autonomy of over 15 years**
- **History: optimised autonomy, local storage of 145 values per pulse input**
- **Designed and assembled in France**



Monitoring energy consumption in a building (water, electricity, etc.).



Count the number of cycles of an equipment to anticipate its maintenance.

# TECHNICAL SPECIFICATIONS



ARF8420AAA

## Mechanical specifications

Weight	163 g (battery included)
Dimensions	200 x 63,5 x 34 mm
Enclosure	IP68, EMERGE™ PC 8731HH grey resin (casing), EMERGE™ PC 8430-15 transparent resin (sole)
Mounting	DIN Rail, Tube, Wall, Collar

## Operating conditions

Operating temperature	-25°C / +70°C
Humidity	0 to 85% RH (non-condensing)

## Device Power Supply

Battery	Dual Battery Pack Capacity: 8000 mAh
Expected Battery Life	For 1 reading per hour and 1 transmission per hour (24 messages per day), 500 pulses >15 years on NB-IoT >15 years on LTE-M

## Update

Applicative configuration	Setup via NFC, using the Adeunis mobile application: "IoT Configurator NB-IoT / LTE-M" on Android/iOS, or remotely.
Firmware	Application firmware and remote modem firmware upgrade (FOTA)

## Conectivity

SIM card	Nano SIM 4FF   Class C (1.8V)
Cellular standard	3GPP LTE Version 13
LPWAN networks	NB-IoT, LTE-Cat-M1
Protocols	LWM2M 1.1, MQTT (optional)

Features	NB-IoT	LTE-Cat-M1
Frequency bands	B1, B2, B3, B4, B5, B12, B13, B17, B19, B20, B25, B26, B28, B66	B1, B2, B3, B4, B5, B12, B13, B14, B18, B19, B20, B25, B26, B28, B66
RF transmitting power	+23 dBm	+23 dBm
Sensibility	>-108 dBm -113 dBm typ	>-103 dBm -107 dBm typ

## Regulations and certifications

Standard	Directive 2014/53/UE (RED)
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## Pulse input

Number of channels	1 or 2 configurable channels
Equivalent input pull-up	50 kΩ
Input frequency	<50 Hz
Type of compatible pulse output	SO, Dry contact, Open collector, Reed switch

