

DEVICE

This device from Lansen is a plug-and-play pulse counter transmitter and can be mounted outdoors or in harsh environments thanks to its IP66-casing.

The device is highly configurable to fit specific needs and suit every installation and can easily be configured wirelessly.

PERFORMANCE

The device uses only the highest quality components to ensure the best performance and service life. The two internal antennas, which are perpendicular to each other for maximum range in all directions between the meter and collectors, are optimized for 868MHz and are fine-tuned for mounting on concrete, wood or plaster.

FEATURES

- Continuously battery level monitoring. Low level warning is issued when battery is nearing depletion
- OMS 4 synchronos message, sending data pseudo random to avoid collisions
- Easy and quick installation
- High accuracy embedded real-time clock for minimum time drift
- Set starting pulse value to synchronize value with a meter
- Supports up to three due dates (historic values)
- Soldered battery for maximum reliability
- Fully compliant with Lansen repeaters

PULSE COUNTER

It is possible to count pulses from one or two meters simultaneously, depending on model. These meters could be, for example, water meters, electricity meters (connected to the S0-port), gas meters etc. Our advanced debouncing algorithm makes sure that only correct pulses are counted for highest possible reliability.

MEASUREMENTS

The total number of pulses is sent periodically using wMBUS-protocol and this makes the sensor ideal for integration in data collecting systems. The data from the device could also be protected using the AES128 encryption compliant with OMS standard.

CONFIGURATION

The pulse counter can be configured wirelessly using a Lansen Wireless MBUS configuration USB-dongle with our program, Lansen Configurator. Below is a list of a couple of parameters which can be configured on the pulse counter:

- Number of pulses per value increments, for example, 1000 pulses = 1kWh
- Adjustable transmission interval
- Possibility to save up to three due dates (historic values) with daily, weekly, monthly, or yearly intervals
- Set starting pulse value to synchronize with a meter
- Possibility to set meter information such as serial number, type and measurement unit to match the connected meter
- Synchronize internal clock



FIRMWARE

MODES	Configurable C, T or S
INTERVAL	Configurable 10s - 1h
ENCRYPTION	AES128 encryption OMS mode 5, Profile A. Configurable ON/OFF
AES KEY	Changeable
STANDARD	T1-Mode, 5 min (20s for -DB version). Encryption ON.

DATA CONFIGURATION

SENSOR TYPE	Water, electricity, HCA, gas, etc. All types available according to EN-13757-3
VALUE FORMAT	0,001 - 10000 Wh/pulse 0,001 - 10000 L/pulse etc. All settings available according to EN-13757-3
METER TYPES	All settings available according to EN-13757-3
DUE DATES	Max three due dates possible with daily, weekly, monthly, or yearly saving intervals

WARNINGS

BATTERY	Low battery
---------	-------------

POWER/LIFETIME

POWER SUPPLY	3.6V Li-SOCI2
VOLTAGE	2.4 to 3.6V
LIFESPAN	16 years typical at 25°, depending on configuration Contact us for exact calculation on your use case.
RADIO	14 dBm (7 dBm for -DB) output power to antenna

GENERAL INFORMATION

STANDARDS	2014/53/EU (RED) EN 13757-3/4:2013, OMS 4.0.2
TEMPERATURE	-40° to +85°
COLOR	Signal white
MATERIAL	PC UV stabilized plastic
SIZE (W x H x D)	55 x 91 x 43 mm + M12 cable gland.
IP	66
PULSE INPUTS	2 simultaneous for -P2, 1 for -P variant
MINIMUM PULSE	5 ms (other setting on request)
REAL-TIME CLOCK	Onboard RTC. Typical MAX drift 30 minutes / year at -15° to +55°

OTHER

CONTACT VOLTAGE	3,6 to 2,5V
CONTACT CURRENT	4uA

DEVICES

LAN-WMBUS-O-P-DB	Single pulse counter device, drive by version
LAN-WMBUS-O-P2-DB	Dual pulse counter device, drive by version
LAN-WMBUS-O-P	Single pulse counter device
LAN-WMBUS-O-P2	Dual pulse counter device