

U-Series Battery-Powered Pulse Counter and Digital Status Sensor

Key Features:

- Pulse counter and digital status monitor with **two channels**.
- LoRaWAN communication protocol for reliable long-range data transmission.
- Compact, indoor-rated design: **145 x 70 x 45 mm**, unobtrusive **IP50** enclosure.
- Simple to install.
- Low-power operation with a **3.6 V lithium battery**, offering at least **7 years of service life**.
- Counts pulses in all modes. Can also send notification according to configured input mode: notify on **input opened**, **input closed**, or **input changed** (either opened or closed).

Sensor Specifications:

	Value
Number of Channels	2
Minimum Closed Time	10 ms
Minimum Open Time	10 ms
Pulse Frequency Limit	0 – 50 Hz Observing minimum open/closed timings
Pulse Minimum Duration	20 ms Observing minimum open/closed timings
Pulse Count Rollover	At 2 ¹⁶ (65536)



Power and Battery:

- **Battery Type:** Lithium Thionyl Chloride (Li-SOCl₂).
- **Capacity:** 8500 mAh, 3.6 V.
- **Estimated Battery Life:** 7 years under typical usage conditions.

Installation and Environment:

- **Mounting:** Indoor installation only (IP30).
- **Dimensions:** 145 x 70 x 45 mm (145 x 90 x 45 mm incl. gland for cable).
- **Integrated Cable Length:** 2 metres.
- **Number of Channels:** 2.
- **Weight:** < 220 g (radio module and 2 x 4 m probes).
- **Storage Temperature:** -40°C to +70°C.
- **Ambient Air Operating Temperature:** -40°C to +85°C.

Approvals:

- EN 61326-1: 2013
- ETSI EN 301 489-3 V2.1.1
- ETSI EN 301 489-17 V3.2.4
- EN 61010-1:2010

Data and Connectivity:

- **Protocol:** LoRaWAN for secure, long-range, low-power data transmission.
 - **Supports:** OTAA, ABP and ADR.
 - Adaptive frequency hopping and dynamic channel selection.

Region	Frequency Band	Supported Channel Plan
Europe	EU868 (863 – 870 MHz)	16 Uplink/downlink channels including primary channels: 868.1 MHz, 868.3 MHz, 868.5 MHz
USA	NA915 (902 – 928 MHz)	64 uplink channels: 902.3 MHz to 914.9 MHz 8 downlink channels: 923.3 MHz to 927.5 MHz
Australia	AU915 (915 – 928 MHz)	64 uplink channels: 915.2 MHz to 927.8 MHz 8 downlink channels: 923.3 MHz to 927.5 MHz