

# Pulse Input S0 to the LoRaWAN

Our converter with four SO inputs to LoRaWAN is designed for reading devices with the pulse outputs, such as electricity meters, water meters and other measurement devices. It enables the integration of traditional SO meters into the LoRaWAN wireless network, facilitating the data collection and analysis at intervals according to the user's needs.

# \\ Pulse Input S0 to the LoRaWAN



- We can read any meter or device with the pulse output within your installation. The pulse output is currently one of the most common outputs on the existing meters and you can connect up to 4 devices to our unit simultaneously.
- Thanks to the possibility of local configuration via cable and the remote configuration over the network, our device significantly reduces the total cost of ownership in projects requiring frequent remote readings of the SO meters.
- The device stores the number of pulses and always sends the last 3 values in case of a network outage.
  Users can also set the alarm threshold values, where a message will be sent immediately regardless of the set reading interval to detect the sudden measurement anomalies.
- With our scripting interface, it is easy to implement the specific functions such as the dual-tariff measurement, continuous sampling, history storage and the remote retrieval or the time synchronization with the network.

### \\ Installation, Operation and Longevity without Worries

ACRIOS Systems converters can read any meter or device with the pulse output while allowing you to connect up to four devices simultaneously. Our products have been tested within the biggest LoRaWAN networks in Europe as well as in the isolated systems.

We have the extensive set of experience

in building and operating the private LoRaWAN networks, which enables us to guarantee the maximum values utilization sent in a single message by our converters. Through our devices, it is possible to transmit both the current and historical readings for the comparison purposes.

## \\ Technical specifications

#### **General specification**

145 x 90 x 55 mm Dimension

Weight 166 g

IP rating IP67

6 fixation points for mounting to the Mounting

wall, tube or collar

4x M4 pan screw and 2x oval hole for Mounting holes

zip-tie fixation

85269200 HS code

#### **Opearting conditions**

Operational temperature: -30 to +60 °C

Humidity 0 to 85% RH (non-condensing)

#### **Regulations and certifications**

Standard CE, RoHS

#### **Device configuration**

Over the cable via ACR-CONFIG and the Local device configuration

configuration app

Downlink via network configuration

**FUOTA** support

Configuration via LUA scripting Configuration options

interface

#### **LoRaWAN**

Remote device

LoRaWAN specification 1.0.3

Registration method OTAA by default, ABP configurable

Class A by default, B and C configurable

EU868 Frequency

12.7 dBm TX Power

51B uplink/downlink and up to 235B Maximum payload length

uplink/downlink\*

#### S0 interface

A number of inputs

Impulse counter 32 bits = 4 294 967 295 pulses

4

Minimum pulse duration (ms) 30

Maximum input voltage (V) 24

Maximum pulse frequency (Hz) 33

Logical 1 range (V) More than 2 (up to 24)

Logical O range (V) Less than 1

Closed mechanical Resistance < 100kΩ contact

Resistance >  $200M\Omega$ Open mechanical contact

ESD rating 16kV per Human Body Model

Euroclamp 2-piece connector Connector

with Philis screws

3.3V DC Auxiliary power supply

Message buffering, wake up on Functionality

input change

#### **Device power supply**

85 - 305 V AC Voltage

Frequency 47 - 63 Hz

Energy consumption Max 4 W

Connector WAGO 2604 CAGE CLAMP®

#### **Packaging**

1x S0 to LoRaWAN

1x installation manual

converter

1x LoRaWAN 2JW0315-868-C675

antenna

#### **Optional accessories**

ACR-CONFIG Configuration cable

#### **Ordering codes**

ACR-CV-101L-I4-EAC SO to LoRaWAN externally powered









<sup>\*</sup> dependant on the network and spreading factor