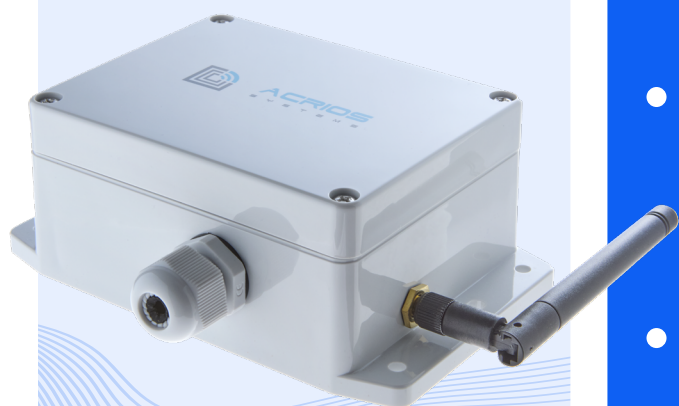


Pulse Input S0 to LoRaWAN

Our converter with four S0 inputs to LoRaWAN is designed for reading devices with the pulse outputs, such as electricity meters, water meters and other measurement devices. It enables integration the traditional S0 meters into the LoRaWAN wireless network, facilitating data collection and analysis at intervals according to the user's needs.

Pulse Input S0 to 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 four 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 S0 meters.
- The device stores a number of pulses and always sends the last three 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 sudden measurement anomalies.
- With our scripting interface, it is easy to implement specific functions such as the dual-tariff measurement, continuous sampling, history storage and a 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 isolated systems. We have an extensive set of experience

in building and operation of the private LoRaWAN networks, which allows us to utilize 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

Dimension	145 x 90 x 55 mm
Weight	336 g with single battery / 475g with double battery
IP rating	IP67
Mounting	6 fixation points for mounting to the wall, tube or collar
Mounting holes	4x M4 pan screw and 2x oval hole for zip-tie fixation
HS code	85269200

Operating Conditions

Operational temperature	-30 to +60 °C
Humidity	0 to 85% RH (non-condensing)

Regulations and Certifications

Standard	CE, RoHS
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Device Configuration

Local device configuration	Over the cable via ACR-CONFIG and the configuration app
Remote device configuration	Downlink via network
FUOTA support	Yes
Configuration options	Configuration via Lua scripting interface

LoRaWAN

LoRaWAN specification	1.0.3
Registration method	OTAA by default, ABP configurable
Class	A by default, B and C configurable
Frequency	EU868
TX Power	12.7 dBm
Maximum payload length	51B uplink/downlink and up to 235B uplink/downlink*

* dependent on the network and spreading factor

S0 Interface

A number of inputs	4
Impulse counter	32 bits = 4 294 967 295 pulses
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 0 range (V)	Less than 1
Closed mechanical contact	Resistance < 100kΩ
Open mechanical contact	Resistance > 200MΩ
ESD rating	16kV per Human Body Model
Connector	Euroclamp 2-piece connector with Philips screws
Auxiliary power supply	3.3V DC
Functionality	Message buffering, wake up on input change

Battery Specifications

Battery size	D-Cell / double D-Cell
Capacity	19 000 mAh / 38 000 mAh
Self-discharge	<1%
Rechargeable	No
Replacable	Yes
Battery connector	JST-XH 2pin

Packaging

1x S0 to LoRaWAN converter	1x installation manual
1x Battery	1x LoRaWAN 2JW0315-868-C675 antenna

Optional Accessories

ACR-CONFIG	Configuration cable
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Ordering Codes

ACR-CV-101L-I4-D	S0 to LoRaWAN single battery pack
ACR-CV-101L-I4-D2*	S0 to LoRaWAN double battery pack

* Under MOQ