

Pulse Input S0 to NB-IoT

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

\ Pulse Input S0 to NB-IoT



- We can read any meter or device with a 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.
- 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.
- Our converters are manufactured in the Czech Republic with the help of local subcontractors. Every unit goes through thorough testing after the assembly to ensure the functionality of the individual communication interfaces, synchronization with the network and to measure the power consumption.

\ Installation, Operation and Longevity without Worries

We can read any meter with a pulse input within your installation. You can connect up to four devices to our unit simultaneously. We have experience with projects for small businesses and large heating plants aimed to optimize the distribution systems and readings in compliance with the EED and the

ESG regulations. For all the NB-IoT devices, we can perform firmware updates remotely via the NB-IoT network, so the customers do not need to make any changes to the installation.

\ \ Technical Specifications

General Specification		SO Interface	
Dimension	145 x 90 x 55 mm	A number of inputs	4
Weight	166 g	Impulse counter	32 bits = 4 294 967 295 pulses
IP rating	IP67	Minimum pulse duration (ms)	30
Mounting	6 fixation points for mounting to the wall, tube or collar	Maximum input voltage (V)	24
Mounting holes	4x M4 pan screw and 2x oval hole for zip-tie fixation	Maximum pulse frequency (Hz)	33
HS code	85269200	Logical 1 range (V)	More than 2 (up to 24)
Operating Conditions		Logical 0 range (V)	Less than 1
Operational temperature	-30 to +60 °C	Closed mechanical contact	Resistance < 100kΩ
Humidity	0 to 85% RH (non-condensing)	Open mechanical contact	Resistance > 200MΩ
Regulations and Certifications		ESD rating	
Standard	CE, RoHS	Connector	Euroclamp 2-piece connector with Philips screws
Device Configuration		Auxiliary power supply	3.3V DC
Local device configuration	Over the cable via ACR-CONFIG and the configuration app	Functionality	Message buffering, wake up on input change
Remote device configuration	Downlink via network	Battery Specifications	
FUOTA support	Yes, over the NB-IoT network	Battery size	D-Cell / double D-Cell
Configuration options	Configuration via Lua scripting interface	Capacity	19 000 mAh / 38 000 mAh
NB-IoT		Self-discharge	<1%
Bands	B1/B2/B3/B4/B5/B8/B12/B13/B14/B17/B20/B26/B28	Rechargeable	No
NB module	SIM7022	Replaceable by the customer	Yes
Supported protocols	UDP	Battery connector	JST-XH 2pin
Antenna	External	Device Power Supply	
TX Power	23 dBm	Voltage	85 - 305 V AC
SIM form factor	3FF, chip SIM on demand	Frequency	47 - 63 Hz
Supported NB-IoT features	PSM, eDRX	Energy consumption	Max 4 W
Maximum payload length	512 B uplink, 1024B downlink*	Connector	WAGO 2604 CAGE CLAMP®
* might be dependent on the network. Tested with Vodafone network		Packaging	
Optional Accessories		1x SO to NB-IoT converter	1x installation manual
ACR-CONFIG	Configuration cable	1x NB-IoT 2JW1024 antenna; 4G LTE	
Ordering Codes			
ACR-CV-101N-I4-EAC	SO to NB-IoT externally powered		