

1.0 Introduction

The Arcus-EDS IMPZ counter is a battery back-up data storage unit and KNX Bus Interface for remote reading and monitoring.

Types: Rail housing (IP20)

on-wall housing (IP65)



2.0 KNX Interface

Item Chart:

The following items are available for remote reading with the KNX/EIB System:

Nr.		Data Point Type	Data Type
0	Accumulated Volume in m ³	DPT14.076 = Volume	Measurement 4 Byte
1	Current Flow m ³ /unit of time	DPT14.077 = Volume Flow	Measurement 4 Byte
2	Current Time	DPT10.001 = Time	Time 3 Byte
3	Current Date	DPT11.001 = Date	Date 3 Byte
4	Last Control Date	DPT11.001 = Date	Date 3 Byte
5	Last Control Reading	DPT14.076 = Volume	Measurement 4 Byte
6	Next Control Date	DPT11.001 = Date	Date 3 Byte
7	Consumption	DPT14.076 = Volume	Measurement 4 Byte
8	Consumption Reset	DPT07.000 = Reset	Reset 16 Bit
9	Consumption Date	DPT11.001 = Date	Date 3 Byte
10	Consumption Time	DPT10.001 = Time	Time 3 Byte
11	Serial Number	DPT16.000 = String	Identification 14 Byte

Accumulated Volume
Current Flow
Current Time
Current Date
Last Control Date
Last control Reading
Next Control Date
Consumption
Consumption Date
Consumption Time
Serial Number

in m³, the current meter reading.
Volume flow in m³/unit of time, parameters for the unit of time are set up.
Internal clock.
Internal date.
The date when the last control reading was saved at 12:00 a.m.
The meter reading from the last control date at 12:00 a.m.
The date when the next control reading will be saved at 12:00 a.m.
Water consumption since the last consumption reset.
The date of the last consumption reset.
The time of the last consumption reset.
The serial number on the meter.

Transmission requirements are set by the ETS parameters.

The following items can be adjusted:

Current Time The internal clock of the water meter is reset.
Current Date The internal date of the water meter is reset.
Next Control Date The next control date is reset.
Consumption Reset Consumption is set to zero and the current date and time are saved. If the reset PIN does not equal zero then the transmitted reset value must equal the PIN value. If the reset PIN is zero then the reset value must not be zero.

General settings	
Send all values periodical	Do not send periodical
Pulse-Unit Pulse per Unit	1
Pulse-Unit (* 10 [^])	2
Presetting	0
Reset PIN/ (0 without pin)	0
Kind of pulse counter	Volume flow rate
Volume flow rate unit	per hour
Automatic daylight saving time	yes

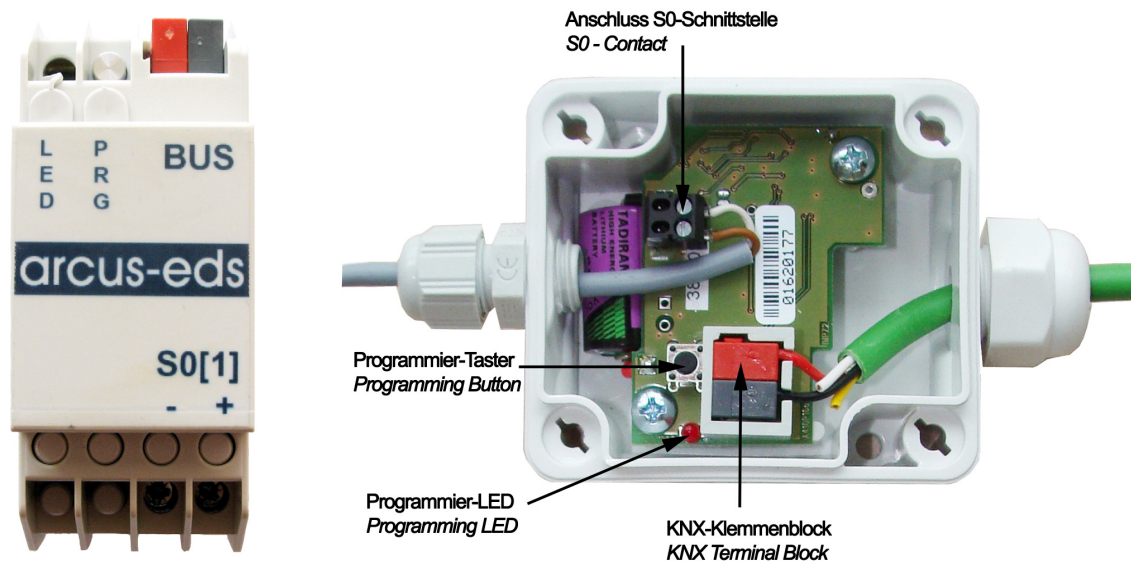
Parameter:

The following settings are available to set the parameters with ETS:

Send all values periodical	The measured data is shown in preset cycles. If the data is not shown periodically it will be shown when there is a change; a minimum interval of 10 seconds is necessary to reduce bus overload.
Pulse-Unit Pulse per Unit Pulse-Unit * 10 [^]	The impulse value for the meter can be set. Example: Displayed in m ³ with 1 Impulse/l requires the setting 1 * 10 ³ , the input value =1 und the exponent = 3 .
Presetting	If the readings of the counter and the item value differ, the meter can be synchronized. The values are synchronized from the start and a 0 should be input. If the meter is used without a S0 connector it can be resynchronized. Previously counted impulses are entered. 12.5 m ³ with 1 Impulse/L so that a value of 12500 is only updated when the new meter reading is more than the old reading.
Reset PIN	To ensure that only authorized users can reset the consumption value, a PIN can be entered. The reset value must match the PIN. If the PIN is zero, the reset value must not equal zero.
Kind of pulse counter	you can decide between two options: Volume Flow or Energy
Volume Flow Unit	The volume flow can be determined: volume flow in m ³ /sec , m ³ /min , m ³ /h or m ³ /day.

3.0 Installation

The water meter must only be installed and put into operation by an authorized specialist. In addition, knowledge of Engineering Tool Software (ETS) is required. Start-up is carried out with ETS Version 2 or higher. You will find the water meter in ETS under manufacturer: Arcus-eds, product family: meter, product type: impulse meter/water meter.



Program de-activate and reset sensor:

If there is an error in programming and the counter no longer reacts, you can delete the project by pressing the program button. Press the program button down while connecting the EIB bus clamp and wait for the program LED to light up. This takes from 5-10 seconds.

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