1. Safety Information

⚠ The housing of the meter shall not be opened.

⚠ The technical data of the impulse outputexit must be considered.

2. Description of function

The pulse exit permits the output of pulses that can be derived from the energy, the volume or the error status**.
Two channels are available whose functions can be parmeterised with the service software or who can be adapted in “Para menu” of the meter.
Output takes the form of standard pulses or as “high-definition pulses”. The pulse duration is identical for channel 1 and channel 2.

3. LCD-Display

ⓘ **Note:** According to the parameterisation of the meter display extent as well as indicated data can deviate from this description. In addition, certain button functions can be locked.

General/Communication “LOOP 3“

General/Communication

Puls Function

Channel 1 (CH1)

Channel 2 (CH2)

Pulse duration

4. Parameterisation

The function of standard pulses is pre-parameterised with CE for channel 1 (CH1) and CV for channel 2 (CH2).
An adaption can be executed directly at the “Para menu” of the meter or with the service software.

ⓘ **Note:** Detailed information for parameterisation with the service software you will find in the UltraAssist user manual.

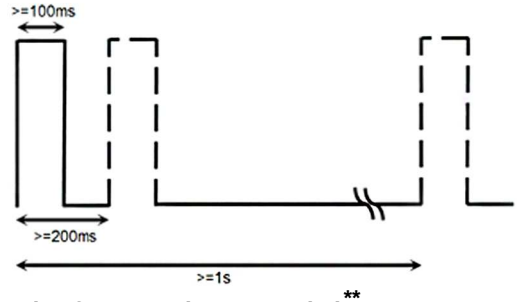
Pulse significances

Output mode		Output value
Channel 1 (CH 1)	**CE*** (Count Energy)	Pulse for quantity of energy
	CV (Count Volumen)	Pulse for volume
Channel 2 (CH2)	**CV*** (Count Volume)	Pulse for volume
	RI** (Ready Indication)	Pulse for the operating states “Ready / Fault"
	PP** (Pre payment)	Cable break indication

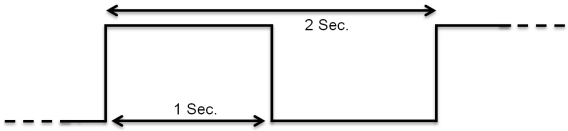
Designation	Pulse duration [ms]	Pulse significance		
		CE [kWh]	CE [MJ]	CV [m³]
Standard	100	1	1	0,1
High-definition	10	0.1	0.1	0.01

Settings for standard pulses

Pulse for energy, volume
Period duration > 200ms
Pulse duration 100 ms conducting

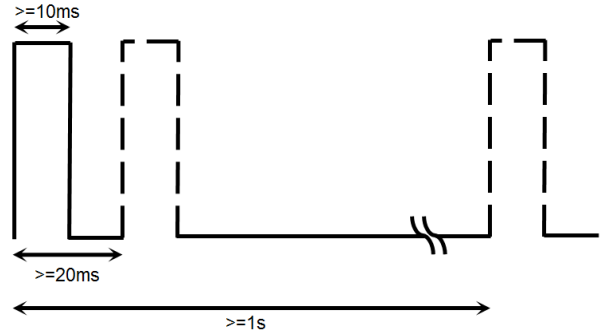


Pulse for operating states (RI):**
“Ready“ pulsed “conducting“, i.e. 1 s pulse duration,
“Fault“ constantly „non-conducting“



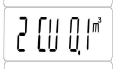
Settings for high definition pulses

Pulse for energy, volume
Period duration > 20 ms
Pulse duration 10 ms “conducting“



4.1 Display of the Roll-Menu in “Para-mode“ for the pulse output function

Channel 1 (CH1)



Channel 2 (CH2)

Pulse duration

Cabel break recognition**

Pulse for the operating states “Ready / Fault”**

*) The function of standard pulses is pre-parameterised with CE for channel 1 (CH1) and CV for channel 2 (CH2).
**) Only for T230

4.2 Call up parameter operation

Note: The access to the parameterisation is in LOOP4.

Proceed as follows to start the parameterisation operation:

- Hold the button long (for more than 3 s) until  apperars on the LCD.
- Press the button briefly (for less than 2 s) until  appears on the LCD.
- Press the button long (for more than 3 s).
- Now the input mask is activated. The first input segment starts to flash.
- Enter the code.

Note: In order to gain access to the “Para menu“, enter the current meter date (MMDD).

- Press the button long (for more than 3 s). An automatic counter runs up from 0-9.
- Let go of the button at the desired figure.
- Press the button briefly (for less than 2 s). The sequence segment is selected.

The next digit to the right flashes. Repeat the above steps for all digits.
With correct input apperars a roll-menu which changes every 1.5 s the menu option.

4.3 Selecting Parameters

In order to select a parameter proceed as follows:

- Press the button briefly (for less than 2 s) in order to activate the parameter to be changed.
- Press the button long (for more than 3 s) in order to change the flashing value.

4.4 Parameterisation

For parameterisation proceed as follows:

- Press the button briefly (for less than 2 s) in order to select the value that shall be changed.
- Press the button briefly (for less than 2 s) in order to change the flashing value.
- Press the button long (for more than 3 s) to order to select the parameter.
- The LCD shows a star symbol briefly in order to confirm.

Repeat the above steps for all parameters.

Hinweis: During parameterisation it is important to ensure that only meaningful values are entered, as no plausibility check is done.

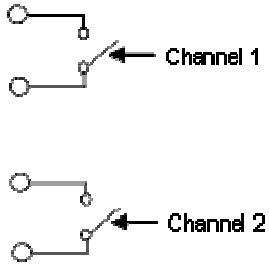
4.5 Completing parameterisation

In order to leave the parameterisation operations proceed as follows:

- Press the button briefly (for less than 2 s) when  is displayed on the LCD.

5. Technical Data

Cabel labeling	passive pulse output
Cabel	1,5 m; 4-wired, LL84201 4xAWG28 / 0,2 mm²
Cabel diameter	4 mm
Output type	open drain
Voltage	max. 30 V
Current	max. 30 mA
Dieletric strength	500 V_{eff} against ground
Classification	OB/OC (according to EN 1434-2)
On/Off resistance	<74 Ω / 6 MΩ
Output connection	



You will also find up-to-date information on our heat meters in the INTERNET at: **www.landisgyr.com**.

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