



Split Prepaid Gas Meter

The Laison split type STS prepaid gas meter system consists of two parts, the meter and separate customer interface unit with RF wireless communication and dot matrix type LCD to support local languages. Tokens are available in multiple ways. The whole solution provides flexible ways on recharging the meter, which is the most attractive feature of Laison STS prepayment meter system. Moreover, it supports AMR/AMI functionality, by which it could remotely collect meters' data and detect possible gas leakage & tamper situations.



Features

- Prepaid
- Data Security
- Anti External Magnetic Interference
- Step Water Tariff
- Consumption Data Record
- Insufficiency Alert



Functionalities

Real time clock

Adopting separate real time clock chip on meter to make sure the accuracy error <math><0.5s/day</math>

Step tariff

Supports max. 10 steps of gas tariff, realize the real time monetary calculation in meter. this function only be available for meters with measure mode of by amount. when consumed credit exceeds the fixed gas volume, the credit will be deducted according to the latest price multiply consumed volume. the billing is according to the monthly accumulated gas consumption on different steps.

Insufficient gas warning

Low credit alarm - if remaining gas in meter reaches the alarm value, the buzzer should beep and the LCD shall give indication to remind the customers that the gas is about to used up.

Meter Parameter Query

Meters' corresponding parameters could be queried via CIU by LoRa RF Wireless Communication or Infrared Communication through TWO (2) digits Data Query Token Group.

Recharge Limitation

Anti-gas storage, if remaining gas+ current recharged gas> recharge limitation, it shall reject the recharge operation, to prevent gas storage.

Valve Auto-Clean

Meter's valve will be opened & closed or closed and opened once at defined time interval to prevent the valve from stuck and check whether the valve working status.

Overdraft Function

Emergency Gas, customers could still consume gas even if the balance credit in meter is used up if Overdraft Function is activated.

Technical Specifications

Nominal flow Q_n	m ³ /h	1.6 2.5 4.0
Maximum flow Q_{max}	m ³ /h	2.5 4.0 6.0
Minimum flow Q_{min}	m ³ /h	0.016 0.025 0.040
Total Pressure Loss	Pa	≤250Pa
Working Pressure	kPa	0.5kPa - 50kPa
Cyclic Volume	dm ³	1.2
Permissible Error	$Q_{min} \leq Q \leq 0.1Q_{max}$ $0.1Q_{max} \leq Q \leq Q_{max}$	+3% +1.5%
Min. reading of the counter	dm ³	0.2
Max. Reading of the counter	m ³	99999.999
Working Humidity	%	≤93%
Working Temperature	°C	-200C ~ 500C
Storage Temperature	°C	-300C ~ 600C
Pulse Equivalent	m ³	Dual Pulse, each 1m ³ equals to 100 pulse
Power Supply	Lithium Battery, with theoretical battery lifespan 6 years	



Technical Specifications

Material	ABS for Main Case and PET for Nameplate
Maximum Flow Qmax	8cm (Width) * 14cm (Length) * 3cm (Height)
Minimum Flow Qmin	200g
Power Supply	<ul style="list-style-type: none">• AC Power with Adapter (Voltage 5V, Current >500mA)• Dry Battery (4pcs AAA Dry Battery)
Communication Method	<ul style="list-style-type: none">• LoRa RF Wireless Com.• Infrared Com.
Working Distance	<ul style="list-style-type: none">• 100-200m by LoRa RF Wireless Com.• 5m by Infrared Com.
Communication Protocol	IEC62055-41,51
Working Temperature	00C - 500C
Working Humidity	10% - 90%
LCD	Dot Matrix LCD with Backlight for displaying.
Buzzer	Beep for indication & Alarm
LED	LED for indication of LoRa RF Wireless Com. Status

