

MLCC Ultrasonic Thermal Energy Meter

Innovating Measurement Professional Smart
Meter Manufacturer

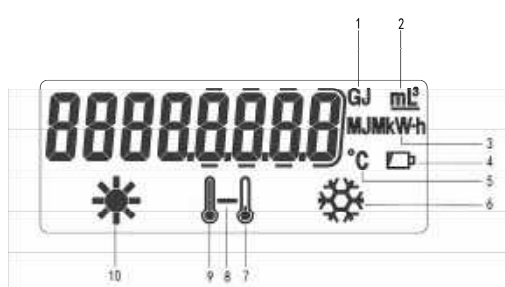


Basic Information

MLCC Ultrasonic Thermal Energy Meter is an intelligent measuring instrument composed of a paired temperature sensor, flow sensor and calculator. The calculator achieves accurate measurement of flow, heat or cooling by processing the temperature difference collected by the sensor and the time difference of sound waves passing through the fluid, and can provide recording and data transmission for various applications of heating or cooling pipelines.

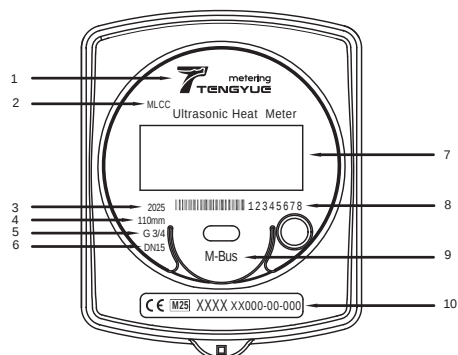
- No moving parts in the measuring mechanism, ensuring no wear and tear
- Supports vertical, horizontal, or inclined installation angles
- High-precision temperature measurement probe, PT1000
- Supports non-full pipe detection
- Low pressure loss
- IP67 protection rating, adaptable to various harsh installation environments
- Supports remote meter data reading: wired reading via RS-485 modbus/M-Bus

LCD Recognition



1	Energy Measurement Unit	6	Cooling Capacity Indicator
2	Fluid Measurement Unit	7	Outlet Temperature Indicator
3	Energy Measurement Unit	8	Temperature Difference Indicator (7&8&9)
4	Low Battery Voltage Indicator	9	Inlet Temperature Indicator
5	Temperature Measurement Unit	10	Heating Capacity Indicator

▶ Nameplate



- 1 Manufacturer's Logo
- 2 Model Number
- 3 Year of Production
- 4 Dimensions
- 5 Connection Thread
- 6 Nominal Diameter
- 7 LED Display Area
- 8 Meter Address
- 9 Communication Method
- 10 Certification Mark

▶ Technical Specifications

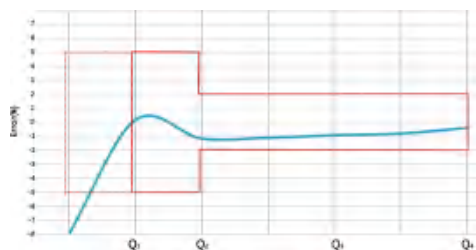
Model	Qs	Qp	Qt	Qi	R(Q3/Q1)	Pressure Loss Class
	m³/h	m³/h	m³/h	L/h	/	ΔP(bar)
MLCC-15	3	1.5	0.15	30	R50	0.25
				15	R100	
MLCC-20	5	2.5	0.25	50	R50	0.25
				25	R100	
MLCC-25	7	3.5	0.35	70	R50	0.25
				35	R100	
MLCC-32	12	6	0.6	120	R50	0.25
				60	R100	
MLCC-40	20	10	1	200	R50	0.25
				100	R100	

Description	Value	Unit
Max flow indication	999999.99	m³
Heat max indication	99999999	kW·h
Accuracy class	Class 2	-
Pressure loss	≤0.025	MPa
Max working pressure	PN16	
Temperature difference range	3~75	K
Temperature range	4~95	°C
Resolution temperature	0.01	°C
Environmental/Machinery category	Class A;M1	-
Battery life	≥6years(ER18505);≥10years(ER26500)	-
Installation position	Horizontal or Vertical	-
Temperature sensor	Pt1000	-
Display	LED, 8 digits	-
Interface Protocol	M-Bus/RS485 EN13757/Modbus (188 customizable)	-

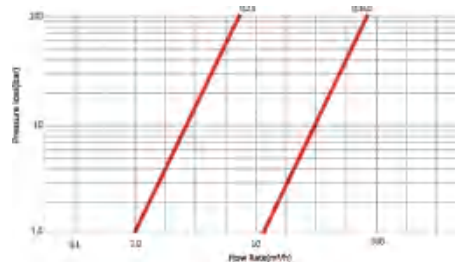
Communication Technical Specifications

Feature	Parameters	
Interface	M-BUS	RS485
Protocol	188/EN13757	Modbus
Baud rate	2400bps/9600bps	9600bps
Communication range	500m	1000m
The maximum number of connectable	500	256
Communication power supply	9-24V	12-24V
Physical layer	Two-wire system	Four-wire system

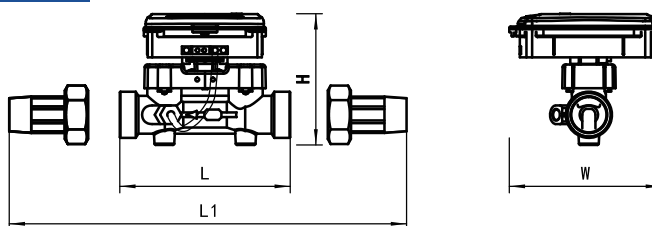
Standard Error Curve Chart



Pressure Loss Curve Chart



Dimensions



Dimension	15	20	25	32	40
Length mm	110	130	160	180	200
Length1 mm	205	235	281	305	330
Width mm	125	125	125	125	125
Height mm	86	86	89	100	120
Meter thread	R 1/2	R 3/4	R1	R1 1/4	R 1 1/2
Pipe thread	G 3/4 B	G1 B	G1 1/4 B	G1 1/2 B	G2B

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