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OverView:

UTM22 Ultrasonic BTU Meter is an innovative BTU Meter with static flow sensor based on the ultrasonic measuring principle. UTM22 is designed for measuring the use of heating in which water is the heat/ cool bearing medium.

UTM22

UltraSonic BTU Meter

Feature:

- Advanced function
- Low pressure drops
- No metering of air
- Leading to long lasting metrology
- Wide dynamic metering range
- Pinpoint measuring accuracy
- Pre-equipped for communication
- Mounting in any installation position
- Insensitive against lime & sand
- Long product life, because there is no moving parts
- Automatic self diagnosis and fault detection

Application:

It utilizes ultrasonic measuring methodology and microprocessor technology.
All calculation and flow measuring circuits are designed on one single board, thus offering exceptional accuracy and reliability.
UTM22 gives importance to flexibility with its programmable functions and install-uninstall communication units

IoT Ready:

UTM22 supports multiple communication interfaces for both wired and wireless which suitable for any
type of installation environment, e.g. M-Bus (EN1434), RS485 (Modbus), Pulse, LoRaWAN, Sigfox.

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Flexible Battery Life Span

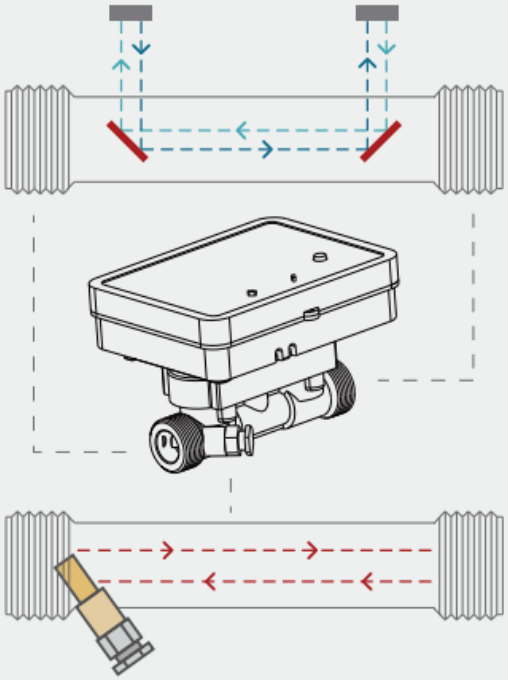
UTM22 has no moving parts, presents as IP65, and its body is fabricated from durable brass material. This robust design makes the UTM22 maintenance-free and highly precise throughout its flexible 6 or 10 or 16 years battery life depends upon customers' needs.

UTM22 ULTRASONIC BTU Meter

Ultrasonic Flow Metering | Temperature Metering Unit | Calculator Unit

Ultrasonic Flow Metering:

Ultrasonic flow meter measures by the transfer of ultrasound signals between transducers with the h elp of mirrors.

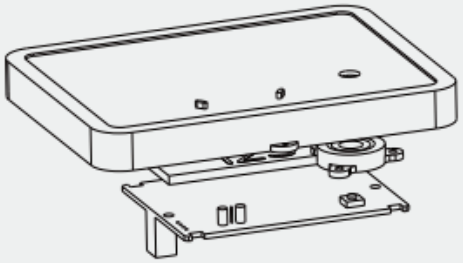


Temperature Metering Unit:

PT1000 type BTU sensors are used which they are calibrated, certified. If input water temperature metering prob is integrated with the meter body where flow meter is, thus the output water temperature metering prob is mounted to a suitable point on the network return water direction. Also meter could be installed in out flow position.
Default cable length is 1.5m, but 3m length is also available as per request.

Calculator Unit:

It is the unit that process energy calculation by the flow rate data received from flow rate metering unit and temperature data received from temperature metering unit.
Its calibration is performed in software at factory.
Calculated energy and other information is displayed on the LCD when button is pushed.
These information may be remotely read via optical port and communication unit.



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Dimentions:

Model	UTM22-15	UTM22-20	UTM22-25	UTM22-32	UTM22-40
Pipe Diameter	DN15	DN20	DN25	DN32	DN40
Minimum Flow Rate, qi(m3 /h)	0.02	0.05	0.07	0.12	0.2
Permanent Flow Rate, qp(m3 /h)	1.5	2.5	3.5	6	10
Maximum Flow Rate, (m^3/h)	3	5	7	12	20
Overload Flow Rate, (m^3/h)	4.5	6.5	10	18	24
Connection	G¾"	G1"	G1¼"	G1½"	G2"
Length (mm)	110	130	160	180	200
Width (mm)	96	105	114	120	130

Specifications:

Temperature	Range: 4°C - 95°C, T: 3k - 65k
Temperature Sensor	A pair of PT1000 platinum resistor
Metrological Class	Class 2, (EN1434)
Maximum Operation Pressure	1.6Mpa
Pressure Loss	ΔP<25kPa at qp
Pressure Stage	PN16
Protection Class	IP65/ IP68
Battery	6/ 10/ 16 years
Data Storage	• 36 months history data, including accumulated heat energy and volume,etc. • Total heat energy, volume, running hours,etc.
Operating Temperature	-30°C~55°C
Interface & Communication	• M-Bus • Pulse Output/ Pulse Input • RS485 • LPWAN (LoRaWAN, Sigfox)
Installation	Horizontal or Vertical
Display and Indication	• Unit: kWh, MWh, GJ (optional) • LCD: 8-digit (back illumination) • Accumulated: 0.1kWh-9999999.9kWh.
Standard Compliance	• EN1434 • OIML R 75

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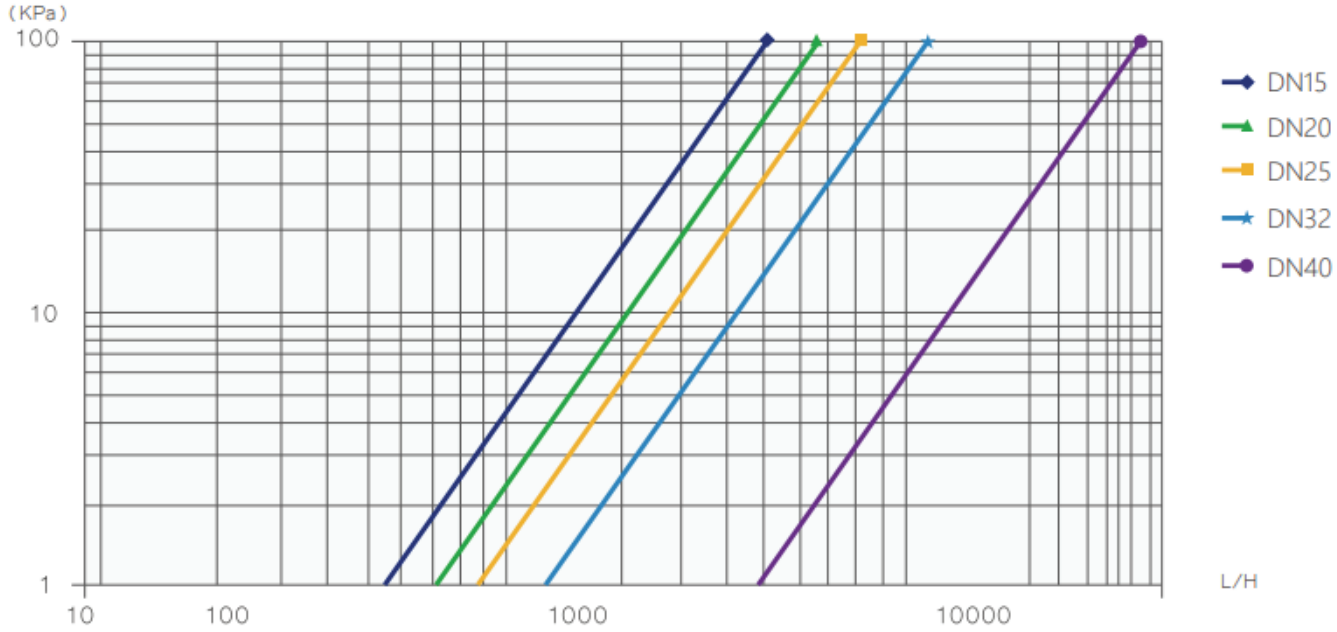
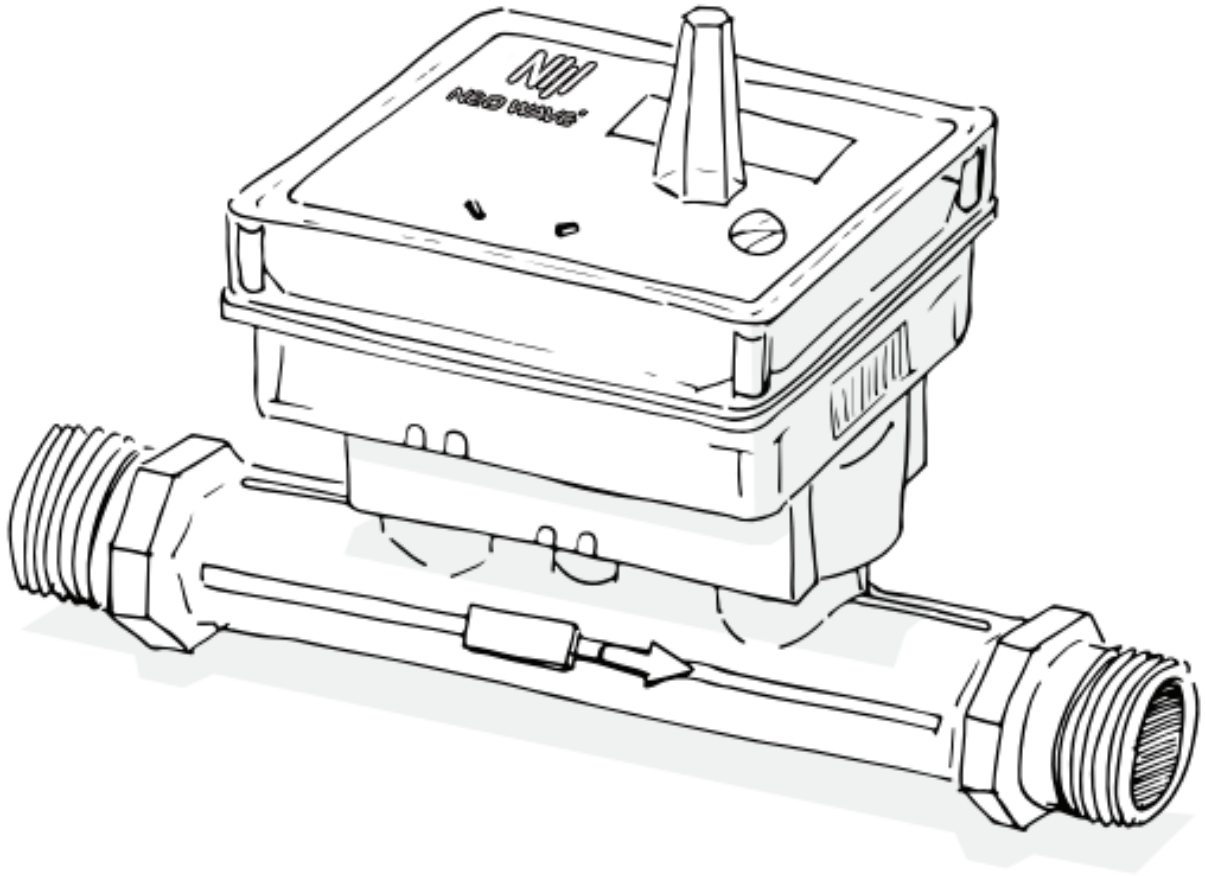
UTM22 Ultrasonic BTU Meter Pressure Loss





For technical support please contact: support@neowave.tech