

SonoSelect 10

Tender text

General description:

Compact ultrasonic Heat, Cooling and bifunctional meter with MID certificate, accuracy class 2, brass flow sensor, integrated energy calculator with an option for add-on AMR communication modules, instant diagnostic and on-site supply or return pipe installation configuration through smart phone app, monthly data logger for 2 years, separate MID approved pair of Pt1000 temperature sensors, including sealing material, declaration of conformity and user & installation guide. For cooling meters a wall mounting kit should be delivered with the product.

Flow sensor:

Shall use ultrasonic measuring technology with flow measurements every 0.5 second in brass body and accuracy class 2 according to EN 1434, no calming section or inlet/outlet restrictions, insensitive to dirt and pipe stress, for mounting in any installation position.

- Nominal flows: qp 0.6 / 1.5 / 2.5 / 3.5 / 6.0 m³/h
- Thread connections DN15 / DN20 / DN25 / DN32
- Overall lengths: 110 mm / 130 mm / 160 mm / 260 mm
- Protection class IP65
- Cable length between flow sensor and calculator 1.5 m
- Temperature range from 5°C to 95°C
- Operating pressure 16 bar
- 1st verification certificate for each meter shall be available upon request

Energy calculator:

Shall measure temperature every 4 seconds, include 2 years of stored data, with yearly and monthly values for diagnostics and billing purposes, mountable on the flow sensor or wall bracket. Connected to flow sensor with min 1.5m cable. Display shall include accumulated values of heating or cooling energy, volume, values of pulse input 1 and 2, current values of flow, heat or cooling power, supply and return temperatures. The calculator should have an optical interface for reading data logs over smart phone app.

- Units on display: kWh – GJ – Gcal - °C – K – m³ – m³/h – l/h
- 85x35mm LCD display with 8 digits
- Protection class IP65
- Optional integrated M-Bus module and additional slot for add-on AMR modules
- Communication options:
 - Integrated wired M-Bus
 - Wired M-Bus with 2 pulse inputs add-on module
 - Wireless OMS 868.95 MHz with 2 pulse inputs module
 - 2 pulse input module
 - 2 pulse output module
- Power supply:
 - Replaceable battery 2x AA-cell with minimum 16+1 years of operating life
 - Mains supply 230V

Temperature sensors:

MID approved in class B, soldered Pt 1000, 2 wire, diameter 5.2 mm, length 26 mm, M10 x 1 brass nipple with pin lock for direct mounting, one sensor already mounted in a flow sensor body, IP 65 protection class, operating pressure PN 25 bar, for temperature range 0°C to 105°C, cable length of min 1.5 m.

Smart phone app:

With smart phone app, readouts and configuration of the energy meter shall be provided wirelessly through LE Bluetooth. App should provide read out data like energy consumption, customer location, serial number, dual display of the meter which is useful if the meter is in hard-to-reach location or in case of hydraulic balancing commissioning. With app installer shall, be able to configure return or supply pipe installation position, energy units, AMR communication modules and find installation and user guide. Additionally, it should be able to run an installation, function and diagnostics test including ultrasonic transducers and ultrasonic measurement test. Tarif function can be added via SonoApp as well.