



SENSOSTAR 2C

Micronics Calculator for Heat/Cooling Meters



- Battery easy to exchange; optional: power supply via additional power pack
- Measuring cycle: 30 s; optional: calculator with 3 V power pack 4 s
- EEPROM for secure data storage
- Communication interfaces:
 - wireless M-Bus;
 - wireless M-Bus + 2 pulse inputs;
 - M-Bus;
 - M-Bus + 2 pulse inputs;
 - pulse output for volume and energy;
 - pulse output for heat and cooling energy

Technical Data:

Calculator

Temperature range	°C	1 – 150; optional: 1 – 180
Ambient temperature	°C	5 – 55
Temperature difference range ΔT heat	K	3 – 100 (3 – 130 for temperature range 1 °C – 180 °C)
Temperature difference range ΔT cooling	K	-3 – -50
Minimum temperature difference ΔT heat	K	$\Delta T > 0,05$
Min. temperature difference ΔT cooling	K	$\Delta T < -0,05$
Minimum temperature difference ΔT heat/cooling	K	$\Delta T_{HC} > 0,5 / < -0,5$
Resolution temperature	°C	0,01
Measuring cycle temperature		30 s; optional: 4 s with 3 V power pack
Pulse values	l/pulse	optional: 1; 2,5; 10; 25; 100; 250; 1000; adjustable (TX version)
Display		LCD - 8 digits + special characters
Decimal places		up to 3 after comma
Units		MWh, kW, m ³ , m ³ /h (kWh, GJ, l, l/h, MW)
Interfaces		optical interface (M-Bus protocol); optional: wireless M-Bus; wireless M-Bus + 2 pulse inputs; M-Bus; M-Bus + 2 pulse inputs; pulse outputs for volume and energy or for heat and cooling energy
Power supply		3 V lithium battery; optional: 3,6 V lithium battery; 3 V power pack
Estimated lifetime	years	10 (limited quantity of radio telegrams)
Data storage		nonvolatile memory; once daily
Reading dates		selectable yearly reading date; 15 monthly values via display, 24 monthly values via optical interface or M-Bus
Storage of maximum values		flow and power
Protection class		IP65
CE		yes
EMC		class E1
Mechanical class		class M1
Pulse input interface		microcontroller CMOS input class IB according to EN 1434-2:2007 (D)
Medium		water; optional: water with a propylene glycol or ethylene glycol percentage rate of 20 %, 30 %, 40 % or 50 %

Weight and Dimensions

Weight	kg	0,66 (incl. temperature sensors 3 m cable length)
H x W x D	mm	198 x 123,7 x 45,8

Flow meter requirements

Pulse output device	class OA (reed contact) according to EN 1434-2:2007; class OC (open collector) according to EN 1434-2:2007
Pulse length and pulse interval	at least 25 ms pulse length; at least 25 ms pulse interval

Temperature sensor requirements

Platinum precision resistor	Pt 500
Length of cables (unshielded)	3 m in 2-wire technique; 10 m in 4-wire technique
Installation	direct mounted; in temperature pockets