



Supercal 739 The new generation of compact heat meters

A successful concept equipped with the latest technology

The battery-powered compact heat meter **Supercal 739** follows the highly successful compact heat meter Supercal 539. Sontex has not only improved the new **Supercal 739** but also added a lot of new functionalities and expanded the product range with new versions, and all of that for even a better value for money.

The **Supercal 739** consists of a flow sensor, a calculator and a temperature sensor pair that build an unit. The compact heat meter **Supercal 739** is suitable for measurements of heating, cooling or combined heating/cooling energy in a wide range of applications, like residences, district or local heating or business & commercial buildings. Thanks to many remote readout interfaces the **Supercal 739** easily fits in a building management system or in a smart metering environment.

The **Supercal 739** meets all the requirements and is homologated according to the European Measurement Instruments Directive MID-2004/22/EC module B and D and the standard EN 1434.



Supercal 739 Versatile and flexible

The compact heat meter **Supercal 739** is available as a single-jet flow sensor and as a coaxial multi-jet flow sensor for flows q_n 0.6

 m^3/h ; q_p 1.5 m^3/h ; q_p 2.5 m^3/h . The integrator can be separated from the flow sensor providing an optimum flexibility for the installation.

The **Supercal 739** can be used as heating, cooling or combined heating/cooling energy meter at operating temperatures between 5°C - 90°C. Over two additional pulse inputs (option), additional meters (e.g. warm and cold water meter) can be read out directly or remotely via the heat meter **Supercal 739**.



The **Supercal 739** is available in the following versions:

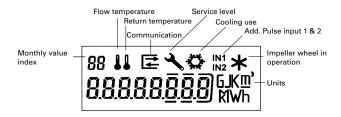
- Flow sensor q_0 0,6 m^3/h ; q_0 1,5 m^3/h ; q_0 2,5 m^3/h
 - Single-jet flow sensor
 - Coaxial Multi-jet flow sensor G2"
 - Coaxial Multi-jet flow sensor M77x1,5
- Standard version of the integrator:
 - Heat meter MID, temperature sensors \emptyset 5 mm with 1,5 m cable
 - Optical interface
 - Battery 6+1 years

Supercal 739 options

Temperature sensors Ø 5,2 mm or Ø 6 mm	•	•	•	•	•	•	•	•	-	•	•	•	•	•	•	•	•	•	•	-
Battery 12+1 years	•		•	•	-	•		•	•	•	•		•	•	•	-		•	•	•
M-Bus, powered over M-Bus line		-					•					•					-			
Radio Sontex Supercom			-					-					-					•		
Radio Wireless M-Bus and OMS				•					•										-	
Two pulse outputs * °					-					•					•					-
Two pulse inputs						-	-	-	-	•						•	-	-	-	-
Cooling or combined heating / cooling											•	•	-	•	•	•	•	•	•	-

* Heat meter: Heating energy and volume
 * Cooling meter: Cooling energy and volume
 * Combined Heat/Cooling meter: Heating energy and cooling energy

Supercal 739 All data always within reach



To help the reader, the 8-digit LCD display of the **Supercal 739** was designed large and clear. Easy-to-read icons simplify recognition of the different display sequences.

The integrator with its IP65 protection is fully rotatable and removable and thus enables a simple and reliable reading even in difficult installation conditions.

The billing-related values such as cumulative energy, date, volume, and error messages are displayed on the top menu level.

Data storage

Device parameters and cumulative values of energy and volume, cooling energy, all monthly values, set day values, additional meters 1 and 2, hours of operation, types of errors are stored in non-volatile memory (EEPROM). Every hour the cumulative values are updated in the EEPROM.

At the end of month, the monthly values are stored. Depending on the version, 18 monthly values for heating energy, volume, cooling energy and the two additional pulse inputs are stored in the integrator.

Main features

- Single-jet flow sensor, coaxial multi-jet flow sensor G2" and M77x1,5
- Heat meter, cooling meter or combined heat/cooling meter
- Detachable integrator
- Two pulse inputs
- The Supercal 739 has a large number of optional interfaces for remote data reading:
 - Optical interface, M-Bus powered over M-bus line,
 bidirectional Radio Sontex Supercom, Wireless M-Bus, OMS,
 two pulse outputs
- 18 monthly values for heating energy, volume, cooling energy and two extra pulse inputs
- Battery lifetime 6+1 or 12+1 years
- Approval for asymmetrical temperature sensor installation
- Easy to operate and readout concept
- Self-monitoring and error display
- Software for commissioning protocol and configuration

Supercal 739 Flow sensors



Single-jet flow sensor

qp	Threaded connection												Mounting length	Material	PN	Maximum flow qs	Minimum flow qi	Low flow threshold value (50°C)	Threaded hole for sensor	Weight	Kvs value (20°C)	Pressure loss at qp
m³/h	G"	DN	mm		Bar	m³/h	l/h	l/h		kg	m³/h	bar										
0,6	3/4"	(15)	110	Br	16	1,2	12 / 24	3	Yes	0,8	1,2	0,25										
1,5	3/4"	(15)	110	Br	16	3,0	15 / 30	3	Yes	0,9	3,1	0,23										
1,5	1"	(20)	130	Br	16	3,0	15 / 30	3	Yes	1,0	3,1	0,23										
2,5	1"	(20)	130	Br	16	5,0	25 / 50	8	Yes	1,1	5,2	0,23										

^{*(}h / v): horizontal mounting / vertical mounting



Coaxial Multi-jet flow sensor with G2" connection

ф	conn	aded ection AS	Mounting length *EAS	Material	PN	Maximum flow qs	Minimum flow qi	Low flow threshold value (50°C)	Threaded hole for sensor	Weight	Kvs value (20°C)	Pressure loss at qp
m³/h	G"	DN	mm		Bar	m³/h	l/h	l/h		kg	m³/h	bar
0,6	3/4"	(15)	110	Br	16	1,2	12	8	Yes	0,6	1,7	0,13
1,5	3/4"	(15)	110	Br	16	3,0	15	10	Yes	0,6	3,4	0,19
1,5	1"	(20)	130	Br	16	3,0	15	10	Yes	0,6	3,4	0,19
2,5	1"	(20)	130	Br	16	5,0	25	17	Yes	0,7	5,9	0,18

EAS: single pipe connector



Coaxial Multi-jet flow sensor with M77x1.5 connection

qp	conne	aded ection AS	Mounting length *EAS	Material	PN	Maximum flow qs	Minimum flow qi	flow threshold		Weight	Kvs value (20°C)	Pressure loss at qp
m³/h	G"	DN	mm		Bar	m³/h	l/h	l/h		kg	m³/h	bar
0,6	3/4"	(15)	110	Br	16	1,2	12	8	Yes	0,8	1,7	0,13
1,5	3/4"	(15)	110	Br	16	3,0	15	10	Yes	0,8	3,4	0,19
1,5	1"	(20)	130	Br	16	3,0	15	10	Yes	0,8	3,4	0,19
2,5	1"	(20)	130	Br	16	5,0	25	17	Yes	0,9	5,2	0,23

EAS: single pipe connector



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