

## SMARTSONIC

### New generation of multi-beam ultrasonic liquid flow meters

(Preliminary catalog sheet)



1 to 4 - beam flow meters of type SMARTSONIC  
dimensions DN32 to DN500



3 to 8 - beam flow meters of type SMARTSONIC  
dimensions DN100 to DN1200



## Application

Multi-beam ultrasonic flowmeters of the SMARTSONIC SC XXXX series are designed for precise measurement of instantaneous flow rate and volume of measured liquid with a low content of mechanical particles. The measurement principle allows measuring the specified flow rate and volume of electrically conductive and non-conductive liquids in a wide range of operating parameters (temperature, pressure, density, viscosity of the measured medium, flowmeter dimensions, etc.). With regard to the measurement principle, the flowmeters are characterized by long-term stability of measurement accuracy. Their technical properties and parameters are used in a wide range of applications, especially in the chemical and petrochemical industry, in the energy industry, water supply, heat and cold energy measurement and others. For optimal use of flowmeters for various applications, the evaluation electronics are designed modularly, according to the requirements of various applications with 1 to 8 ultrasonic beams.

## Main technical parameters

Supply voltage	24V AC/DC	
Dimension range	DN32 to DN1200	
Number of ultrasonic beams used	1 to 8	
Velocity of the measured medium	0 to 10 m/s	
Temperature of the measured medium	-40° C to 150° C	
Pressure of the measured medium	PN6 to PN250	
Kinematic viscosity of the measured medium	0.1 to 400 cSt	
Ambient temperature	-40° C to 60° C	
Environment	normal, with explosion hazard	
Measurement accuracy	1 - beam flow meter	± 1.0%
	3 - beam flow meter	± 0.4%
	5 - beam flow meter	± 0.25%
	8 - beam flow meter	± 0.15%
Electrical outputs	pulse, frequency, current 4 to 20 mA	
Electrical inputs	binary, current 4 to 20 mA	
Communication	RS485 - Modbus RTU	
Measuring range according to OIML 49, EN ISO 4064	R > 1000	
Design	compact, separate	
Protection	IP67	
Expected certifications	CE, MID, OIML, ATEX, IECEx	