

# FLOWSIC550

High pressure gas flow meter for natural gas distribution







#### Technical data overview

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Measured values	Volume a. c., volumetric flow a. c., gas velocity, volume s. c. $^{(\star)}$ , volume flow under s.c. $^{(\star)}$		
Measurement principle	Ultrasonic transit time difference measurement		
Hazardous area	NEC/CEC (US/CA): Class I Division 1, Groups C, D T4 NEC/CEC (US/CA): Ex ia [ia Ga] IIB T4 Gb NEC/CEC (US/CA): Class I, Zone 1 AEx ia [ia Ga] IIB T4 Gb		
Gas temperature	-40 °C +70 °C		
Operating pressure	ANSI300 (ASME B16.5): 5 bar (g) 48.6 bar (g) ANSI600 (ASME B16.5): 5 bar (g) 97.2 bar (g) Pressure ranges valid for natural gas, meter operation possible at ambient pressure for air		
Conformities	OIML R 137-1&2:2012 AGA 9, 2022		
Enclosure rating	IP66		
Modbus	✓		
Remark	2x		
Type of fieldbus integration	RTU RS-485 (Fed)		
Corrective functions	Volume correction		
Diagnostics functions	Permanent monitoring of measured values		

#### **Product description**

State-of-the-art technology for maximum measurement accuracy: The new FLOWSIC550 ultrasonic compact gas flow meter from SICK ensures highly accurate billing of low volume flows in high-pressure networks – a perfect complement to the FLOWSIC500. Thanks to the absence of mechanical moving parts, the FLOWSIC550 is rugged, reliable, and maintenance-free – allowing for a significant reduction in operating costs. It is overload-proof, accurate and is monitored by an intelligent diagnostics system. FLOWSIC550 can be easily integrated into existing measuring stations. FLOWSIC550 works either in mains operation or is self-sufficient in terms of energy. When used in transfer and measuring stations, FLOWSIC550 ensures a continuous and blockage-free gas supply.

#### At a glance

- Rugged and time-proven ultrasound technology
- · Diagnostics and permanent operational self-monitoring
- Durable and reliable without moving parts
- · Compact meter installations
- Integrated volume correction
- Battery or intrinsically safe power supply
- Bluetooth Low Energy (BLE)

#### Your benefits

- Ultimate measurement certainty and safety of continuous gas supply
- Simple installation, replacement of turbine gas meters
- Reduction of installation costs due to integrated volume correction
- Easy Commissioning and data reading via FLOWgate<sup>TM</sup> (PC and App)
- Minimal operating costs due to being nearly maintenance-free
- Reliable even when the gas flow fluctuates (on/off applications)
- · Self-sufficient operation possible

#### Fields of application

- Gas Measurement of low volume applications at high pressures
- Custody transfer: gas distribution, storage, and transmission systems
- Town border stations and city gate stations
- High pressure industrial gas measurement
- Compressor fuel gas measurement
- Applications where a continuous gas supply must be ensured

#### Ordering information

Other models and accessories → www.sick.com/FLOWSIC550

Product segment: Flow meters
Product family group: Flow meters
Product family: FLOWSIC550

• Measurement principle: Ultrasonic transit time difference measurement

Measured values: volume a. c., volumetric flow a. c., gas velocity, volume s. c. (\*), volume flow under s.c. (\*)

Measuring medium: natural gas (dry, odorized)
Conformities: OIML R 137-1&2:2012, AGA 9, 2022

• Communication interface: Modbus

• Communication Interface detail: RTU RS-485

• Process temperature min.: ≥ -40 °C

Process temperature max.	Operating pressure min.	Operating pressure max.	Enclosure rating	Туре	Part no.
≤ +70 °C	≥ 5 bar (g) ≥ 5 bar (g)	≤ 48.6 bar (g) ≤ 97.2 bar (g)	IP66	FLOWSIC550	On request

### SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is "Sensor Intelligence."

## **WORLDWIDE PRESENCE:**

Contacts and other locations -www.sick.com

