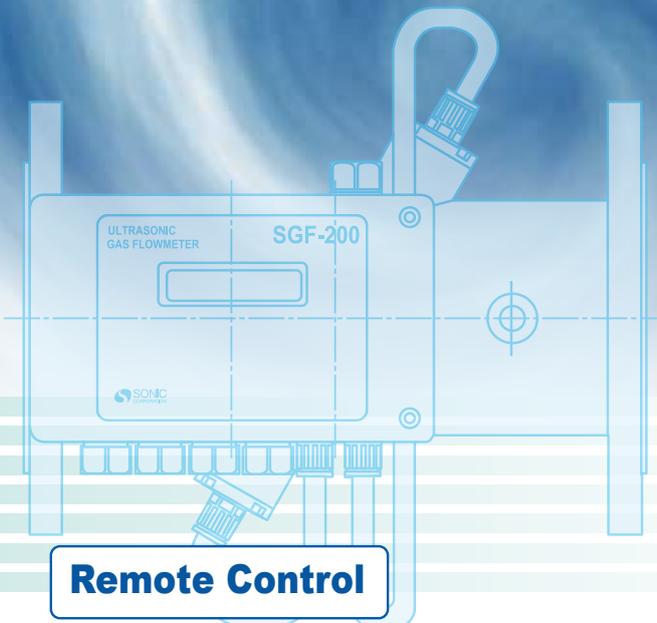


# Ultrasonic Gas flowmeter SGF-200

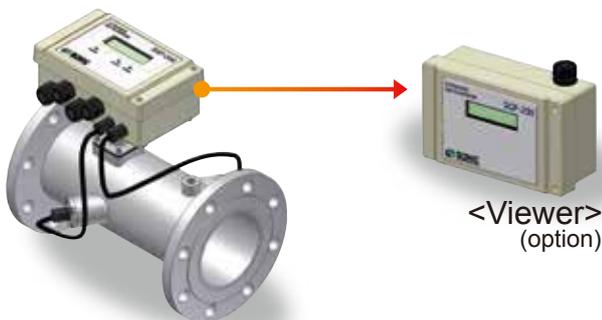
ULTRASONIC GAS FLOWMETER



**Remote Control**



**Viewer (option):** Remotely controls and configures parameters, various display menu of integrated flowrate, transient flowrate, temperature and pressure level.



## ■ Features

- Wider measurement range and high accuracy
- Temperature automatic correction
- Attachable to vertical piping
- Integrated flow rate and instant flow rate selectable output

Lineup (nominal diameter)  
40mm, 50mm, 65mm, 80mm,  
100mm, 125mm, 150mm

## ■ Converter

### ● Specifications

Model: SGF-200

Measurement method: Ultrasonic transit time method

Applicable liquid: Air, Oxygen, Nitrogen, Gas (no corrosive gas)

Measurement accuracy: +/- 2%RD (flow speed 1 ~ 30m/s)  
+/- 2cm/s (flow speed less than 1m/s)

Flow range: 0 ~ 30m/s

Temperature measurement: Ultrasonic thermometer(Air only)  
Accuracy: +/- 2 °C

Structure: Outdoor use (IP65 equivalent)

Material: ADC12

Paint color: White ivory (Munsell 5Y8/1.5)

Ambient temperature: -10 ~ +50

Humidity: No dew condensation

Power supply: AC90 ~ 250V (50/60Hz)  
DC24V +/-10%

Power consumption: less than 7.5VA

Weight: Approximately 1.6kg

### ● Output

Analog output : Contents: Instant flow rate (normal flow or reverse flow)

Signal: DC4 ~ 20mA

Load resistance : less than 600Ω

Time constant: 0 ~ 120sec (1sec step)

Low-cut: 0 ~ 10% (1% step)

Contact output: Contents: normal / reverse flow integrated pulse,  
upper / lower limit alarming,  
anomaly signal, range over

Signal(x3): Open collector standard 30V, 0.25V

Pulse width: 1 msec or 50 msec

Low-cut: 0 ~ 10% (1% step)

Digital output: Contents: instant flow rate, integrated flow rate, temperature, pressure, alarm

Serial interface: RS422 (baudrate: 38400bps)

### ● Input

Temperature input: Current input: DC4 ~ 20mA (input resistance 200Ω)

Conversion standard: 0 °C

Pressure input : Current input: DC4 ~ 20mA

Conversion standard: 101.325kPa(abs)

### ● Display

LCD : 16 characters x 2 lines LED back light

Contents: instant flow rate, cross section average flow speed,  
integrated flow rate(normal, reverse, differences),  
temperature, pressure

## ■ Spool piece

Nominal diameter: 40mm, 50mm, 65mm, 80mm, 100mm, 125mm, 150mm

Material: Metal parts: SGP, SS400 (Nickel plating)

Sensor parts: aluminum alloy, epoxy resin

Seal parts: NBR

Condition: Temperature range: 0 ~ 60°C

Pressure range: less than 1MPa

Installation requirement : Upper stream side 10D, Lower stream side : 5D or more  
(D is inner diameter)

## ■ Viewer (\* option)

### ● Model

CV-200

### ● Display

LCD: 16 characters x 2 lines, back light

Contents: instant flow rate, cross section average flow speed, integrated flow rate(normal, reverse, differences),  
temperature, pressure

### ● Operation: Parameter configuration

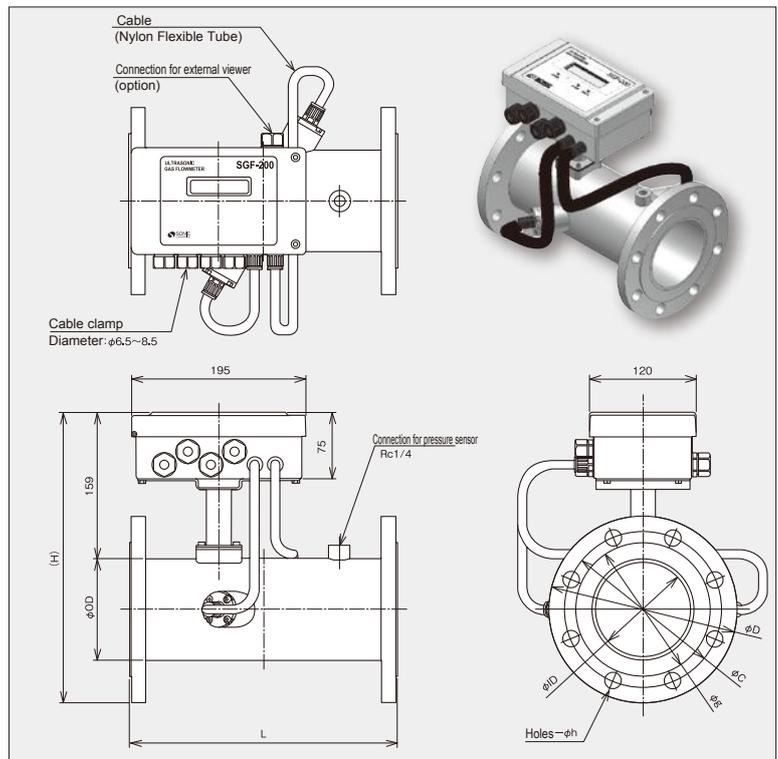
### ● Output: Digital output: instant flow rate, integrated flow rate, temperature, pressure, alarm information

Serial interface: RS422 (Baudrate: 38400bps)

### ● Accessory: Cable( max. 30m): 1 cable

\*SGF-200 is under the control of viewer if the viewer option is selected.

## ■ Dimension



## ■ Specification table for nominal diameter

Nominal diameter(mm)	Dimension (mm)								(H)	L	Approx. weight (including converter) [kg]	Max. flow rate		
	Flange spec.:JIS10kRF				Steel pipe spec.:JIS G3452							Flow rate [m <sup>3</sup> /h]	30°C, 0.5MPa [m <sup>3</sup> /h·ntp]	30°C, 0.7MPa [m <sup>3</sup> /h·ntp]
	φD	φC	φh	Holes	φg	φOD	φID							
40	140	105	19	4	81	48.6	41.6	253	200	8.8	140	740	980	
50	155	120	19	4	96	60.5	52.9	267	230	9.8	230	1200	1600	
65	175	140	19	4	116	76.3	67.9	285	250	11.9	390	1980	2650	
80	185	150	19	8	126	89.1	80.7	296	300	12.7	550	2800	3750	
100	210	175	19	8	151	114.3	105.3	321	300	14.7	930	4780	6380	
125	250	210	23	8	182	139.8	130.8	354	350	19.6	1400	7400	9850	
150	280	240	23	8	212	165.2	155.2	382	400	25.4	2000	10400	13900	

⚠ CAUTION FOR SAFETY : Please read surely INSTRUCTION MANUAL before operating.

● Specification is subject to change without prior notice for improvement.



### HEAD OFFICE

1-18-2, Akebono, Tachikawa, Tokyo, JAPAN 190-0012

TEL. +81-42-512-5496 FAX. +81-42-595-9950

URL <http://www.u-sonic.co.jp/english>

email : [info@u-sonic.co.jp](mailto:info@u-sonic.co.jp)

### Singapore Representative office

80 Robinson Road #10-01A Singapore068898

Tel +65-6420-6250