

SI-200A

Ex ia Fixed Gas Detector



DESCRIPTION

SI-200A is an intrinsically safe (Ex ia) fixed gas detector designed to provide fast and accurate detection of toxic gases such as HCl, NH₃, and Cl₂—gases that typically experience delayed response due to adsorption in conventional flameproof (Ex d) detectors. With an optimized sensor housing and internal structure, SI-200A minimizes adsorption effects and ensures superior response time and measurement accuracy.

This diffusion-type explosion-proof detector is suitable for hazardous areas where toxic, oxygen, or combustible gases may be present. It features a large LCD for real-time gas concentration and self-diagnostics. The device supports 4–20mA analog output (HART optional), RS-485 digital communication, and offers convenient wireless configuration and calibration via wireless.

KEY FEATURES

- Explosion-proof structure (Transmitter)
- Intrinsically safe sensor housing
- Optimized for fast and accurate detection of adsorptive toxic gases (e.g., HCl, NH₃, Cl₂)
- 4-digit gas concentration display
- Self-diagnostic function via LCD
- 4–20mA output (HART optional) / RS-485 communication
- Wireless communication supported
- Suitable for hazardous area installation

SPECIFICATION

Model	SI-200A	
Dimensions	169(W) x 188.5(D) x 107(H)mm	
Weight	2.4kg	
Operation Power	DC : +24Vdc ±10%	
Power Consumption	3.6W @+24VDC	
Operation Mode Display	FND, Concentration of Gas, Alarm, Malfunction	
Relay	1st Alarm, 2nd Alarm, Fault Alarm (Rated 2.0A @30vdc)	
Analog Output Signal	4-20mA	
Digital Output Signal	RS-485	
Measuring Method	Diffusion	
Operating Temperature	-40°C to +60°C	
IP	IP66	
Input and Setting	4 Buttons & RS-485 & Wireless	
Warranty	2 years (Device), 1 year (Sensor)	
Wireless interface	RS-485 Modbus, HART (Option)	
Certification	IECEX	Ex ia IIC T4 Gb
	ATEX	II 2 G Ex ia IIC T4 Gb
	INMETRO	Ex db ia IIC T4 Gb, Tamb = -40 °C à +60 °C
	CSA&UL	Class I, Zone 1, AEx ia IIC T4 Gb Class I, Div 1, Group A, B, C, and D (CANADA Only) Zone 21, AEx tb IIIC T80°C Db IP66 Class II, Div 1, Group E, F, G (CANADA Only) Ex ia IIC T4 Gb Ex tb IIIC T80°C Db IP66 -40 °C to +60 °C
	PESO	Ex db ia IIC T4 Gb
	KCs	Ex db ia IIC T4 Gb
	Compliance	SIL2, RoHS2, WEEE

DIMENSIONS (Unit:mm)

