

SENKO

KOSDAQ
LISTED COMPANY



Our History

SENKO Co., Ltd. was established based on own Electrochemical Gas Sensor Technology.

SENKO Co.,Ltd. was founded in 2004 and has developed Gas detector, Gas monitoring system based on his own Gas sensor technology. Now, SENKO is producing more than 12 gases sensor with various physical structure. SENKO has invested in research and development of new gas sensor and has customized typical electrochemical gas sensor to satisfy the requirements of Consumer product manufacturer like Samsung Electronics & LG Electronics. We are welcome to cooperate with customers for the customized sensor development.



- 2021** Acquired U&E Providing total solutions for safety, security and air quality monitoring systems
Establishment Canada branch in Calgary
- 2020** Listed on the KOSDAQ market
Registered in Abu Dhabi National Oil Company
- 2019** Certifications for SGT-P(IECEX, ATEX)
OEM contract with Encored Japan Inc.(Soft Bank)
IoT Odor monitoring system project with LG hausys
Registered in Kuwait Oil Company(KOC)
- 2018** Establishment EU branch in UK
Received 3 million dollars export tower award from Korea government
Received citation from Ministry of Trade, Industry and Energy
- 2017** Establishment Russia branch in Moscow
Certifications for SGT(ATEX, IECEX, CSA, UL)
- 2016** IoT "SOOM" Brand launching
- 2015** Green technology certificate
IECEX certificate for SI-100, SI-100C and SGT
Co-development program with LG Electronics and Samsung Electronics
System Business Division establishment
New customized sensor developoment for IoT market
- 2014** SENKO China Joint Venture Establishment in Shanghai
Colormetric sensor supply to Samsung Electronics Home appliance
China CPA, CCCF Sertificate
- 2012** SENKO Osan Factory (land 2,968m²)
35 Oversea Countries Distributorship Agreement
Gost & Immetro Certicate
Award from Korea President
- 2004** SENKO Co., Ltd. Establishment

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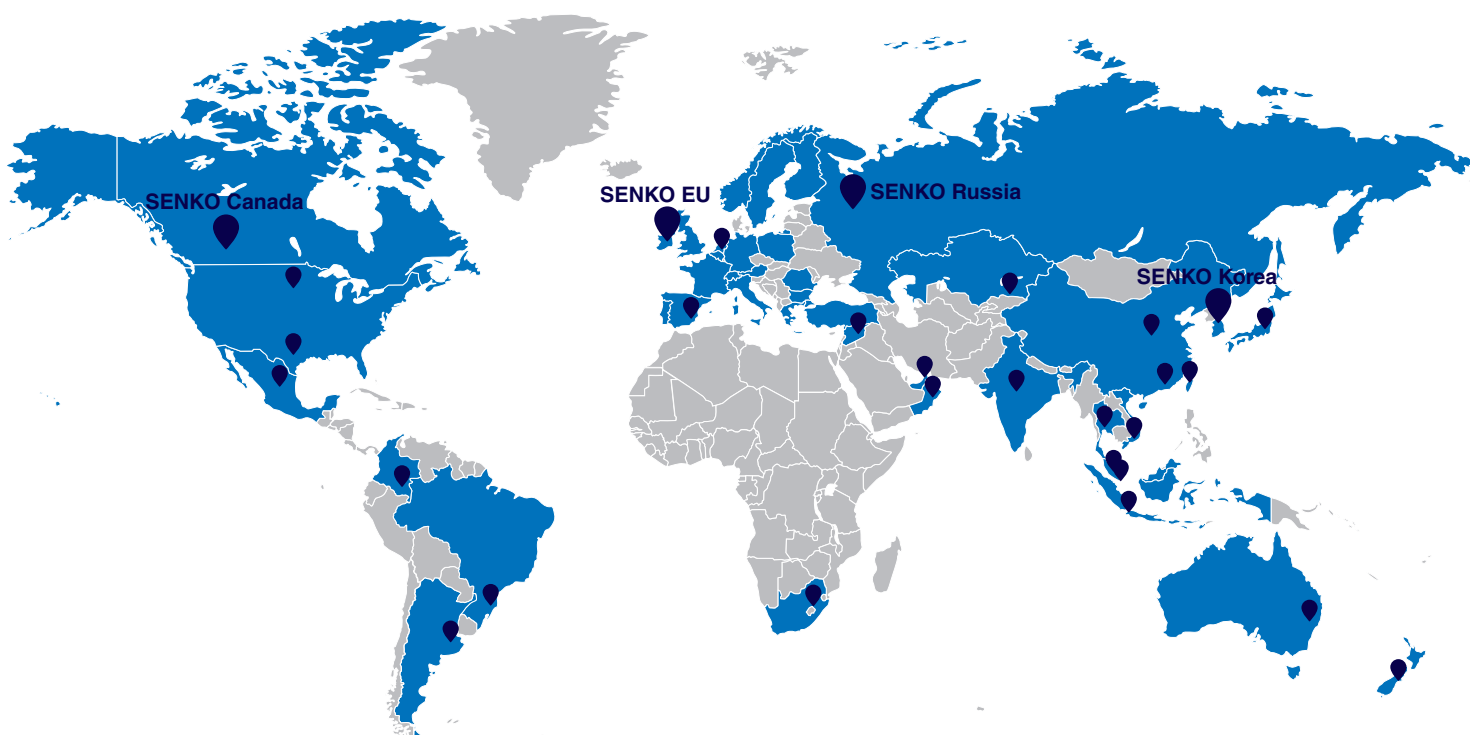
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Worldwide Distributors



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SGT

Disposable Single-Gas Detector

SENKO



Description

SGT is a single disposable detector. (SGT-P is replaceable) It operates continuously for two years even without the replacement of the battery or gas sensor in order to protect workers from oxygen deficiency or toxic gases. It measures a gas continuously and displays its concentration and raises an alarm when a risk occurs.

Key Feature

- Disposable type(no sensor or battery change)
- Operates continuously for two years
- Excellent water / dust proof structure
- Automatic checking of the sensor trouble
- High performance audible and vibrating alarm
- Automatic logging of 30EA events
- Easy configuration and data management through IR Link
- Easy calibration through Docking Station



Specification

Model	SGT
Sensor Type	Electrochemical
Measurement	Diffusion type
Display	LCD display
Audible	90dB at 10cm
Warning Lamp	Red Flashing LEDs (Light-Emitting Diode)
Vibration	Vibration Alarm
Battery	Manufacture: Vitzrocell P/N: SB-AA02(P) / System: Lithium Primary Battery Nominal voltage: 3.6V / Nominal capacity: 1.2Ah
Temperature & Humidity	-40°C ~ +50°C(for Toxic) / -35°C ~ +50°C(for O ₂) 5%~95% RH (Non-condensing)
Case	Rubber Enclosure
Accessories	Calibration Cap, Manual, Calibration and Quality report
Option	External Sampling Pump (SP-Pump101), SENKO-IR Link, Docking Station
Size & Weight	Size: 54(W) × 91(H) × 32(D)mm Weight: 93g(Toxic), 104g(O ₂) (Battery, clip included)
Operating Life	24 months, based on 2 minutes of alarm per day
Event Log	Recent 30 alarms
Approval	ATEX II 1 G Ex ia IIC T4 Ga
	CSA&UL Class 1, Zone 0, ex ia IIC T4 Ga
	IECEx Ex ia IIC T4 Ga
	INMETRO Ex ia IIC T4 Ga

Accessories



IR-Link
Communication
Connects to the computer in
order to program configura-
tion and download data log



Sampling pump
(SP-Pump101)



Extension Probe
5M/ 10M



SGT
Docking Station

Sensor specification

Gas	Measuring range	Low Alarm	High Alarm
O₂	0~30%Vol	19%Vol	23%Vol
CO	0~500ppm	30ppm	60ppm
H₂S	0~100ppm	10ppm	15ppm
H₂	0~1000ppm	100ppm	500ppm
SO₂	0~50ppm	2ppm	5ppm
NH₃	0~100ppm	25ppm	35ppm
NO₂	0~20ppm	3ppm	5ppm

SGT-P

Replaceable Single-Gas Detector

SENKO



Description

SGT-P is a single replaceable gas detector designed to detect oxygen deficiency and presence of toxic gas in the ambient environment. SGT-P is the replaceable type of a gas sensor and battery. When activated, SGT-P continuously monitors ambient air for the presence of a specific gas and alerts the user to potentially unsafe exposure with LED, vibrating, and audible alarms in the event that gas concentration exceeds alarm set points.

Key Feature

- Sensor and Battery Replacement
- Power on / off available
- Configuration via exclusive IR Link

Specification

Model	SGT-P
Sensor Type	Electrochemical
Measurement	Diffusion type
Display	LCD display
Audible	90dB at 10cm
Warning Lamp	Red Flashing LEDs (Light-Emitting Diode)
Vibration	Vibration Alarm
Battery	Manufacture: Vitzrocell / P/N: SB-AA02(P) / System: Lithium Primary Battery Nominal voltage: 3.6V / Nominal capacity: 1.2Ah
Temperature & Humidity	-40°C~+50°C (for CO, H2S, H2, NH3, and NO2), -30°C~+50°C(for O2 and SO2), 5% ~ 95% RH (non-condensing)
Case	Rubber Enclosure
Accessories	Calibration Cap, Manual, Test Report
Option	External Sampling Pump (SP-Pump101), SENKO-IR Link, Docking Station
Size & Weight	Size: 54mm(W) x 91mm(H) x 32mm(D) Weight: 93g(Toxic), 104g(O2) (Battery, clip included)
Event Log	Recent 30 alarms
Operating Life	24 months, based on 2 minutes of alarm per day
Approval	ATEX II 1 G Ex ia IIC T4 Ga IECEX Ex ia IIC T4 Ga INMETRO Ex ia IIC T4 Ga

Accessories



IR-Link
Communication
Connects to the computer in
order to program configura-
tion and download data log



Sampling pump
(SP-Pump101)



Extension Probe
5M/ 10M



SGT-P
Docking Station

Sensor specification

Gas	Measuring range	Low Alarm	High Alarm
O2	0~30%Vol	19%Vol	23%Vol
CO	0~500ppm	30ppm	60ppm
H2S	0~100ppm	10ppm	15ppm
H2	0~1000ppm	100ppm	500ppm
SO2	0~50ppm	2ppm	5ppm
NH3	0~100ppm	25ppm	35ppm
NO2	0~20ppm	3ppm	5ppm

MGT

Portable Multi-Gas Detector

SENKO



Description

MGT is an united gas detector measuring four(4) major gases, which cause the most of the industrial accidents, to protect workers from the disasters caused by the Oxygen deficiency, Toxic gas poisoning and gas explosion. It measures continuously four(4) gases (O₂, CO, H₂S and Combustible Gas(CH₄)) and displays their concentrations and raises an alarm(visual, vibrating, and audible) when the risk occurs. It features the dual sensor of CO and H₂S.

Key Feature

- Small size & Light weight
- Rechargeable battery
- 30EA of Bump tests/ Events/ Cal.
- Simultaneously detect 4 different gases
- 25 hours use by one charge for 4-6 hours (P-type)
- 60 days use by one charge for 4-6 hours (N-type)
- Configuration via exclusive IR Link
- Easy check & calibration via Docking Station
- Intrinsic Safety

Accessories



IR-Link
Communication
Connects to the computer in
order to program configura-
tion and download data log



Vehicle power
adaptor



7CH
Multi adaptor



Sampling pump
(SP-Pump101)



Extension Probe
5M/ 10M



Multi Cradle



MGT
Single Docking Station



MGT
Docking Station



MGT
External Filter Adapter



MGT
External replacement
filter for MGT Adapter
(Kit of 10)

Specification

Model	MGT
Self-test	Full function self-test upon activation Sensors, battery and circuitry - continuous
Detecting Method	Diffusion
Display	LCD Display (back-light)
Alarm	LED flashing, Sound, Vibration
Sensor	O ₂ , CO and H ₂ S: Electrochemical Combustible(LEL): IR or Pellistor
IP	67
Temperature	-20°C ~ +50°C
Humidity	5~95% RH(Non-condensing)
Battery	Rechargeable Li-ion power supply unit (2000mAh)
Charge Time	4-6 hours
Battery Life	IR: 60 days continuous / Pellistor: 25 hours continuous
Low Battery Alarm	20 minutes / 10 minutes / 5 minutes expired: 5 long beeps/flashes and then Off is displayed
Warranty	2 years
Weight	240g
Size	61(w) × 114(h) × 43(d)mm
Optional Accessory	MGT-IR Link, Docking Station, SP-Pump 101
Approval	ATEX II 1 G Ex ia IIC T4 Ga CSA&UL Class 1, Zone 0, Ex ia IIC T4 Ga IECEX Ex ia IIC T4 Ga INMETRO Ex ia IIC T4 Ga

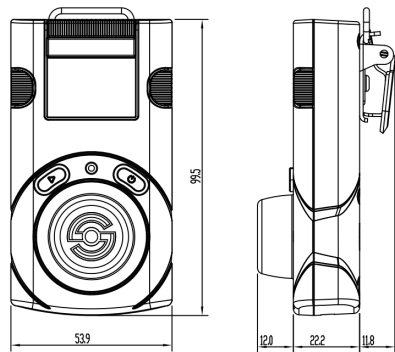
Sensor specification

GAS	Measuring range	Low Alarm	High Alarm
O ₂	0~30%Vol	19%Vol	23%Vol
CO	0~500ppm	30ppm	60ppm
H ₂ S	0~100ppm	10ppm	30ppm
CH ₄	0~100%LEL	10%LEL	30%LEL

iGas Detector CO2

Carbon Dioxide Gas Detector

SENKO



Description

iGas Detector is the most reliable carbon dioxide gas detector designed to monitor the presence of CO2 and alert users to danger with LED, audible and vibrating alarms in confined spaces. CO2 gas accumulated in poorly ventilated areas and confined spaces is colorless and odorless classified as a toxic gas which may cause asphyxia and narcotic effects. Utilizing the high-performance infrared sensor, the iGas Detector CO2 is the best solution to keep workers safe and your operations compliant.

Key Feature

- IR Sensor Technology
- Measured by %vol and ppm
- Rechargeable Li-ion battery
- Automatic logging of 30EA events
- 14days of use by one fully charge
- Lightweight – 135g
- Exchangeable International wall plug Kit
- Easy configuration and data management via PC program
- Configurable Calibration, Bump test, Self test due warning

Specification

Model	iGas Detector CO2
Sensor Type	IR
Measurement	Diffusion type
Display	LCD display
Resolution	0.01%vol / 100ppm
Audible	90dB at 10cm
Warning Lamp	Red Flashing LEDs
Vibration	Vibration Alarm
Battery	Rechargeable Li-ion(polymer) power supply unit (500mAh)
Temperature	-20°C ~ +50°C
Charging Time	100 minutes
Humidity	5%~95% RH (Non-condensing)
Case	Rubber Enclosure
Accessories	Calibration Cap, Charge Cable(USB C-Type) and Adaptor
Option	-
Size & Weight	Size: 30(W) x 50(H) x 35(D)mm , Weight: 135g
Operating Life	14 day
Event Log	Recent 30 alarms
Approval	EMC directive(2014/30/EU), ROHS 2

Accessories



USB Cable
(Standard package)
Connects to the computer in
order to program configura-
tion and download data log



Sampling pump
(SP-Pump101)



Extension Probe
5M/ 10M

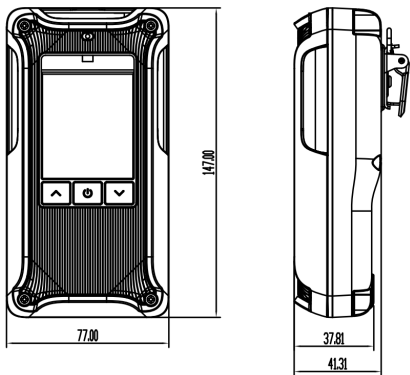
Sensor specification

Gas	Measuring range	Low Alarm	High Alarm
CO2	0~5.0%vol(50,000ppm)	0.5%vol(5,000ppm)	1.0%vol(10,000ppm)

Multi Gas Detector with built-in pump

5-Gas Detector

SENKO



Description

MGT Pump type is a portable multi gas detector used for detecting 5 gases, O₂, CO, H₂S, combustible gas, and toxic gases(Optional).

Key Feature

- Sampling pump built in structure
- Multi 5 gas detector

Specification

Model	Multi Gas Detector with built-in pump 5-Gas Detector
Self-test	Full function self-test upon activation Sensors, battery, Pump and circuitry - continuous
Detecting Method	Pump
Display	LCD Display (back-light)
Alarm	LED flashing, Sound, Vibration
Sensor	O ₂ , CO and H ₂ S: Electrochemical Combustible(LEL): IR or Pellistor CO ₂ : IR VOCs: PID
IP	67
Temperature	-20°C ~ +50°C
Humidity	5~95% RH(Non-condensing)
Battery	Rechargeable Li-ion power supply unit (4,000mAh)
Charge Time	4-6 hours
Battery Life	IR: 5 days continuous / Pellistor: 30 hours continuous(Expected)
Low Battery Alarm	20 minutes / 10 minutes / 5 minutes expired: 5 long beeps/flashes and then Off is displayed
Warranty	2 years
Weight	400g(Expected)
Size	77(w) x 147(h) x 54(d)mm
Optional Accessory	IR Link, Docking Station(Expected)
Approval	IECEx EX ia IIC T4 Ga or EX da ia IIC T4 Ga(Expected)

Sensor specification

GAS	Measuring range	Low Alarm	High Alarm
O ₂	0~30%Vol	19%Vol	23%Vol
CO	0~500ppm	30ppm	60ppm
H ₂ S	0~100ppm	10ppm	30ppm
CH ₄	0~100%LEL	10%LEL	30%LEL
CO ₂	0~5.0%vol	-	-
VOCs	0~6,000ppm	-	-
SO ₂	0~20ppm	-	-
NH ₃	0~100ppm	-	-
NO ₂	0~20ppm	-	-

SP-Pump101

Automatic Sampling Pump



Description

Sampling pump is designed to be used by connecting to SGT, SGT-P, MGT Model. This can be used to check if there is gas leakage when measure the gas underground manhole.

Key Feature

- Simple structure to install locking
- Excellently durable industrial pump installed
- Automatic checking of chocking

Specification

Model	SP-Pump101
Flow rate	Minimum 500cc/min
Alarm display	Low flow alarm / Low battery alarm (Red LED)
Operating temperature	-20°C ~ 50°C
Operating humidity	5% to 99% RH(Non-condensing)
Battery power	1.5V AA size Alkaline battery 1EA
Battery life time	More than 10 hours
Dimensions	30(W) × 254(H) × 47(D)mm
Weight	260g (including Battery)



Accessories



Extension Probe
5M/ 10M

SP secure

Portable Gas Leak Detector

SENKO

Description

SP secure is designed to be suitable for leak detection of any gas piping and valves by equipping a built-in sampling pump. Since the measured gas concentration is displayed in digital number, accurate measurement is possible.

Key Feature

- Sampling pump built in structure
- The digital concentration display
- Detector for the gas leakage
- Both rechargeable battery and alkaline battery are compatible
- Adopt the sensor which detect the low concentrated



Specification

Model		SP Secure	
Measuring gas	LNG/LPG, CombustibleGas	H2	
Measuring method	Catalytic	Catalytic	Electrochemical cell
Measuring range	0~100%LEL	0~100%LEL	0~1000ppm
Sensor life time	> 3 years	> 3 years	> 2 years
Response time	<10sec/90% scale	<10sec/90% scale	<75sec/90% scale
Resolution	1%LEL	1%LEL	Within 5ppm
Measuring type	Auto Sampling type		
Operation time	About 12 hours		
Accuracy	±3%/Full scale		
Parameter Control	Right Side switch(calibration, maintenance, alarm setting)		
Operation mode display	Visual : alarm & status icon, Trouble RedLED Audible : buzzer(90dB @ 10cm)		
Measuring value display	LCD Display(3-digit)		
Alarm display	Visual : alarm & status icon Audible : buzzer		
Alarm level set	Programmable within detection range		
Sampling method	Internal sampling pump		
Flow rate	0.5 liter/min		
Program set mode	Alarm value(1,2 alarm)		
Operating temperature	-20°C ~ 50°C		
Operating humidity	10 to 95% RH(Non-condensing)		
Battery power	Rechargeable NI-MH or AA Alkaline battery 3ea		
Battery life time	More than 12 hours		
Material	Poly carbonate		
LCD size	32(W) × 40(H)mm		
Dimensions	55(W) × 240(H) × 31(D)mm		
Weight	260g (Battery Including)		
Approval	KGS Ex d ia IIB T3		

Accessories



Extension Probe
5M/ 10M

SGT Docking Station

SENKO

Description



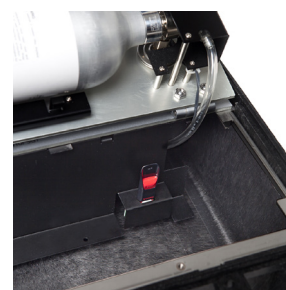
Docking station maximizes the performance of SGT device. It calibrates and does bump test up to four SGT device simultaneously, helping to reduce time. Through Bump test, Docking station tests the gas sensor response and alarm of the devices. In addition, it automatically upgrades the firmware of the devices when the devices are connected to Docking station. Event logs are saved into the USB memory and provide analyses for users. The configuration can be set by connecting Docking station with IR link.

Key Feature

- Calibration, Bump Test
- Displays status on Power LED and Unit LED
- Saves the status and results of Docking station and SGT
- Upgrades Docking and SGT Firmware
- Saves the log data of Docking station and SGT
- Supports user options using a PC program (IR Link/USB)

Specification

Model	SGT Docking Station
Size	47 × 41 × 22cm (18.50 × 16.14 × 8.66 in.)
Weight (Without gas cylinder)	8.2kg
Operating Temperature	41 to +104°F (5 to +40°C)
Warrenty	Full 2 years
Battery Type	Rechargeable Lithium Ion
Battery Life	1000 Bump Tests
LEDs	5 red/green/orange LEDs(1 for each unit, 1 for power)
Memory	USB 8GB Standard
Log Capacity	Approximately Up to 10 million tests (8GB,removable USB memory)
Tests Performed	Bump Test and Calibration
Information Stored	Bump/Cal Logs, Individual Monitor Event Logs, Firmware and Unit Configurations
Gases Available	CO, H2S and O2
Unit Compatibility	Works with SGT
Calibration Gas	Compatible with 58L cylinders
Charging Adaptor	12V, 3A



Accessories



IR-Link
Communication
Connects to the computer in
order to program configura-
tion and download data log

MGT Docking Station



Description

Bump test and calibration are the key features to ensure the safety of devices and users. MGT docking station version II provides bump testing, event management and calibration from a simple to use multi-unit station. It also maintains the all important event logs that demonstrate users are working within company requirements.

Key Feature

- Zero and Span Calibration, Bump Test Function
- Indicate the current status of operation by the Power LED and Unit LED color
- Gas Ventilation system to remove a residual gas
- Save the log events after calibration and bump test
- Enable users to adjust the setting points of Docking station and MGT via IR Link or USB
- Rechargeable battery or power
- Holds up to 4 devices at once

Specification

Model	MGT docking station (Version II)
Size	52.5 x 43.7 x 21.3cm(20.66" x 17.20" x 8.40")
Weight (Without gas cylinder)	11.0kg
Operating Temperature	41 to +104°F (5 to +40°C)
Warrenty	Full 2 years
Battery Type	Rechargeable Lithium Ion
Battery Life	1000 Bump Tests
LEDs	6 Blue LEDs for each unit(unit x 4), 3-color LED for power, Switch Back Light LED(Yellow, Green)
Memory	USB 8GB Standard
Log Capacity	Approximately Up to 5 million tests (8GB, removable USB memory)
Tests Performed	Bump Test and Calibration
Information Stored	Bump/Cal Logs, Individual Monitor Event Logs, Firmware and Unit Configurations
Gases Available	LEL, CO, H2S and O2
Unit Compatibility	Works with MGT(N, P)
Calibration Gas	Compatible with 58L & 116L cylinders
Interface	Ethernet RJ-45(TCP/IP), 10Mb/s
Charging Adaptor	12V, 3A



Accessories



IR-Link
Communication
Connects to the computer in
order to program configura-
tion and download data log

MGT Single Docking Station



Description



Docking station maximizes the performance of MGT device. It provides bump test and calibration to ensure the safety of devices and users. Through Bump test, Docking station tests the gas sensor response and alarm of the devices. In addition, it automatically upgrades the firmware of the devices when the devices are connected to Docking station. Event logs are saved into the SD card and provide analyses for users.

Key Feature

- Zero and Span calibration, Bump Test Function
- Indicate the current status of operation by the power LED and unit LED color
- Gas Ventilation system to remove a residual gas
- Save the log events after calibration
- Enable users to adjust the setting points of docking station MGT via IR Link
- Rechargeable battery or power
- Easy to use, small and light

Specification

Model	MGT Single Docking Station
Size	24.7 x 21 x 10.7cm
Weight	2.85kg
Operating Temperature	41 to +104°F (5 to +40°C)
Warranty	Full 2 years
Battery Type	Rechargeable Lithium Ion
Battery Life	1,000 Bump Tests
LEDs	6 Blue LEDs for unit, 3-color LED for power, Switch Back Light LED(Yellow, Green)
Memory	SD-Card Class 10 (16GB Standard)
Tests Performed	Bump Test and Calibration
Information Stored	Bump/Cal Logs, Individual Monitor Event Logs, Firmware and Unit Configurations
Gases Available	LEL, CO, H2S and O2
Unit Compatibility	Works with SP-MGT(N, P)
Calibration Gas	Compatible with 58L & 116L cylinders(Demand regulator use)
Charging Adaptor	12V, 3A



Accessories



IR-Link
Communication
Connects to the computer in
order to program configura-
tion and download data log

SI-100

Fixed Gas Detector

SENKO



Description

SI-100 is a fixed gas detector installed in a place where potential gas hazard exists to measure oxygen, toxic gas and combustible gas. It shows not only the concentration of gas but also diagnostic result of the unit itself through the LCD display and can be connected to the controller with a standard 4-20mA analog output communication or RS-485 digital communication.

Key Feature

- Various sensors can be applied
- Easy operation with a magnetic bar
- Large digital LCD installed with a blue backlight
- Explosive proof structure
- Water/dust proof structure
- Automatic calibration function
- Long-distance transmission by 4-20mA output



Specification

SI-100				
Model	SI-100			
Measuring gas	Combustible Gas		Toxic Gas	Oxygen
Measuring method	Catalytic	IR	Electrochemical cell	Galvanic
Measuring range	0~100%LEL	0~100%LEL	*Depends on sensor	0~30%vol
Sensor life time	>2years	>5years	>2years	>2years
Response time	<10sec/ 90% scale	<30sec/ 90% scale	*Depends on sensor	<15sec/ 90% scale
Resolution	1%LEL	1%LEL	*Depends on sensor	0.1%vol
Measuring type	Diffusion Type			
Accuracy	±2%/Full scale			
Parameter Control	Front 3 magnetic switch(calibration, maintenance, alarm setting)			
Operation mode display	Visual: LCD alarm display, LCD Backlight, 3 Indicator LED			
Measuring value display	Digital LCD Display(4-digit)			
Alarm display	Visual : LCD alarm display, LCD Backlight, Indicator LED			
Alarm output signal	Relay contact(Max 30Vdc, 5A) when Alarm occurred			
Alarm level set	Programmable within detection range			
Output signal	Analog : 4-20mA(Optional: Hart), Digital : RS-485			
PC interace	RS_485			
Cable/Distance	(4-20mA and Power: CVVSB 1.5sq or AWG 20 / 2,500m max), (RS-485 data communication cable: UL2919 RS-485 1pair / 1,200m max)			
Conduit connection	NPT 3/4" (2way)			
Mounting type	Wall mount			
Program set mode	Alarm value(1,2 alarm), Alarm time(instant@delay) 1~30min, Alarm dead band, output on/off			
Operating temperature	-20°C ~ +55°C			
Operating humidity	5% to 95% RH(Non-condensing)			
Operating power	9~34Vdc 600mA			
Material	Aluminium, Stainless steel(STS304)			
LCD size	55(W) × 30(H) mm			
Dimensions	150(W) × 165(H) × 110(D) mm			
Weight	Standard type: 1.9kg			
Approval	ATEX Ex d IIC T5 Gb IP65			
	CSA (Under certification)			
	IECEx Ex d IIC T5 IP65			
	INMETRO Ex d IIC T5 Gb IP65			

SI-100 Detectable Gases

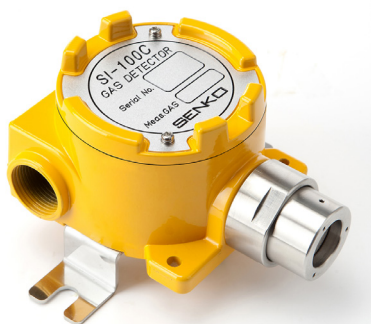
Gas Name	Chemical Formula
Oxygen	O ₂
Carbon Monoxide	CO
Sulfur Dioxide	SO ₂
Hydrogen(ppm or %LEL)	H ₂
Hydrogen Sulfide	H ₂ S
Ammonia	NH ₃
Acetylene	C ₂ H ₂
Ethanol	C ₂ H ₆ O
Toluene(Catalytic)	C ₇ H ₈
Toluene(IR)	C ₇ H ₈
Methane(Catalytic)	CH ₄
Methane(IR)	CH ₄
Chlorine	Cl ₂
Carbon Dioxide (%vol, ppm or %LEL)	CO ₂
Hydrogen Chloride	HCl
VOC	VOC
Xylene(Catalytic)	C ₈ H ₁₀
Xylene(IR)	C ₈ H ₁₀
Hydrogen Peroxide	H ₂ O ₂
Nitrogen Dioxide	NO ₂
Ethylene Oxide	C ₂ H ₄ O
Ethylene(Catalytic)	C ₂ H ₄
Ethylene(IR)	C ₂ H ₄
Nitrogen Monoxide	NO
Hydrogen Fluoride	HF
Isobutane	C ₄ H ₁₀
Propane(Catalytic)	C ₃ H ₈
Propane(IR)	C ₃ H ₈
Hydrocarbon	HC
Silane	SiH ₄
Fluorine	F ₂

*Please contact us for gases not listed in the table.

SI-100C

Fixed Gas Detector

SENKO



Description

SI-100C is a fixed gas detector installing in a place where potential gas hazard exists to measure oxygen, toxic gas and combustible gas without LCD display. It can be connected to the controller with a standard 4-20mA analog outputs.

Key Feature

- Explosive proof structure
- Water/dust proof structure
- 4-20mA Analog outputs
- Built-in Calibration Mode
- 2 wires for toxic gases / 3 wires for LEL

Specification

Model		SI-100C		
Measuring gas	Combustible Gas		Toxic Gas	Oxygen
Measuring method	Catalytic	IR	Electrochemical cell	Galvanic
Measuring range	0~100%LEL	0~100%LEL	*Depends on sensor	0~30%VOL
Sensor life time	>2years	>5years	>2years	>2years
Response time	<10sec / 90% scale	<30sec / 90% scale	*Depends on sensor	<15sec / 90% scale
Resolution	1%LEL	1%LEL	*Depends on sensor	0.1%VOL
Cable/Distance	Signal cable: 3-wire > CVVSB 1.5sq or AWG20		Power + Signal cable: 2-wire > CVVSB 1.5sq or AWG20	
Measuring type	Diffusion Type			
Accuracy	±3%/Full scale			
Parameter	Control Switch(calibration), Admin Console(maintenance, OPTION)			
Operation mode display	2-LED(Operating and Zero Cal, Span Cal. LED)			
Output signal	4-20mA DC(3wire for combustible gas, 2wire for other gas)			
Conduit connection	NPT 3/4" (2way)			
Mounting type	Wall mount			
Setting	1 Switch Interface(Calibration), Console set available(Option)			
Remote Set	via Console (Zero Calibration, Span Calibration, Calibration Gas Concentration Set, Factory default, 4-20mA Calibration, Range Set, Data Logging)			
Operating temperature	-20°C ~ +55°C			
Operating humidity	5% to 95% RH(Non-condensing)			
Operating power	9~34Vdc 600mA			
Material	Aluminium, Stainless steel(STS304)			
Dimensions	102(W) × 137(H) × 87(D)mm			
Weight	1.0kg			
Option	Console			
Approval	ATEX Ex d IIC T5 Gb IP65			
	CSA (Under certification)			
	IECEX Ex d IIC T5 IP65			
	INMETRO Ex d IIC T5 Gb IP65			

SI-100C Detectable Gases	
Gas Name	Chemical Formula
Oxygen	O2
Carbon Monoxide	CO
Sulfur Dioxide	SO2
Hydrogen(ppm or %LEL)	H2
Hydrogen Sulfide	H2S
Ammonia	NH3
Nitrogen Dioxide	NO2
Methane(Catalytic)	CH4
Methane(IR)	CH4
Chlorine	Cl2
Carbon Dioxide (%vol, ppm or %LEL)	CO2
Hydrogen Chloride	HCl
Hydrogen Peroxide	H2O2
Nitrogen Monoxide	NO
Hydrogen Fluoride	HF
Isobutane	C4H10
Propane(Catalytic)	C3H8
Propane(IR)	C3H8
Hydrocarbon	HC
Silane	SiH4
Fluorine	F2

*Please contact us for gases not listed in the table.



SI-100D

Gas Leak Detector

SENKO



Description

SI-100D is a combustible (LNG/LPG) gas leak detector that consists of a sensing unit and receiver. This is used to detect gas leaks in the pipe or valve. SI-100D can be used with present any indicators and PLC using analog output (4-20mA). SI-100D is a low-priced compact and light entry-level product.

Key Feature

- Explosion proof structure
- Long distance communication with 4~20mA analog output
- Convenient installation
- Simple structure, reasonable price

Specification

Model	SI-100D
Measuring range	LNG/LPG(methane/propane)
Measuring type	Diffusion type
Measuring method	Catalytic
Measuring range	0~100%LEL
Sensor life time	> 2 years
Response time	<10sec/90%scale
Accuracy	±3%/Full scale
Output signal	4-20mA DC
Cable/Distance	CVVSB 1.5sq or AWG20 × 3wire (Power + Signal) / 2,500m max
Conduit connection	NPT 1/2"
Mounting type	Wall mount
Operating temperature	-20°C ~ +50°C
Operating humidity	0%~95% RH(Non-condensing)
Operating power	24V DC +/- 20%, <90mAh
Material	Aluminium
Dimensions	93(W) × 106(H) × 89(D)mm
Weight	0.6kg
Approval	KCS Ex d IIB T4/14-KB2BO-0422



SI-H100 / SI-H100 with Pyrolyzer (Option)

Sampling type fixed-Gas Detector

SENKO



Description

SI-H100 measures sample gas by sensor cartridge in the case upon suction remotely on a real time basis constantly. The monitor points up to 100 feet (30meters) away and shows alarm of dangerous concentration, fault situation, and so on, upon attaching on the wall. SI-H100 assists to prevent or control a variety of gas related accidents including toxic, flammable gases in a plant providing reliable sensor technology.

Pyrolyzer option can be installed underneath the standard SI-H100. for detection and measurement through thermal decomposition in case of substances that do not have a gas sensor that can be generally detected, such as NF3.

Key Feature

- Simple to install, easy to use the product
- Extractive pump system which has 2years life time (Sampling up to 30M)
- Smart sensor cartridge with on board
- Large bright graphic LCD based on Intuitive icon with various expressions
- 3 built in relays for Alarm 1st , 2nd and Fault
- Ethernet (PoE) communication
- Optional Pyrolyzer module
- 4-20mA analog output with event reporting and fault
- Modbus/TCP Ethernet can be easily connected to all control and alarm systems ports
- Update the latest version of firmware available via the web
- RS-485, TCP Ethernet to connect alarm system and communication
- Detects gas which is parts-per-billion(ppb) levels

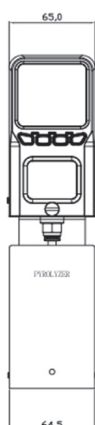
Specification

Model	SI-H100
Size	124mm(H) X 65mm(W) X 155mm(D)
Weight	2Kg
Operating voltage	DC : 24V \pm 10% PoE : 36V~57V (Typical : 48V)
Flow rate	500mL/min (MAX 900)
Power consumption	Approximately 5.0W
Measurement display	Graphic LCD (160 X 100), Gas concentration, Flow rate, Alarm, Rear light, Device abnormality
Alarm	90dB at 10cm
Relay	Primary Alarm, Secondary Alarm, Fault Alarm
Output signal	Analog, 4-20mA
Digital communication	RS-485, TCP Ethernet
Sampling distance	Length of input gas tube: Up to 30m (FEP tube) Length of exhaust gas tube: Up to 30m (FEP tube)
input/output tube	1/4" Teflon tube
Operating temperature	0°C ~40°C
Certification	CE
Control/Set	4 Button & RS485 & Ethernet
Warranty of the device	2 years
Warranty of sensor cartridge	1 year
Remote interface	Ethernet, RS-485
Wiring	4 to 20mA / DC power / Relay: Up to 14 AWG
ETC	Update the latest version of firmware available via the web

SI-H100 Detectable Gases	
Gas Name	Chemical Formula
Oxygen	O2
Carbon Monoxide	CO
Sulfur Dioxide	SO2
Hydrogen(ppm or %LEL)	H2
Hydrogen Sulfide	H2S
Ammonia	NH3
Prophine	PH3
Nitrogen Dioxide	NO2
Methane(Catalytic)	CH4
Methane(IR)	CH4
Chlorine	Cl2
Hydrogen Chloride	HCl
Hydrogen Peroxide	H2O2
Hydrogen Fluoride	HF
Propane(Catalytic)	C3H8
Propane(IR)	C3H8
Hydrocarbon	HC
Silane	SiH4
Boron Trichloride	BCL3
Ozone	O3
VOC	VOC

*Please contact us for gases not listed in the table.

Option



Accessories



Adapter



Under cover

SI-301

Fixed Gas Detector (Sampling Type)

SENKO



Description

SI-301 is a sampling type fixed gas detector, measures the sample gas through a sensor cartridge on a real-time basis. This is a device that helps to prevent or control various gases related accidents including suffocation, intoxication, fire, explosion, corrosion, etc in several semiconductor or industrial sites. The measured gas concentration is transmitted in real time with an output of 4-20 mA and can be configured through three internal relays. In addition, users also can widely benefit from control set of RS-485/Ethernet/Bluetooth connection.

Key Feature

- Explosion-Proof structure (IP65)
- Cartridge type sensor – Easy maintenance
- Built-in flow control function
- Large LCD with Digital Concentration Indication and Digital Flow Indication
- Control set of 4 Button / RS485 / TCP Ethernet / Bluetooth

Applications

- Semiconductor industry
- Sewage treatment plant
- Mine
- Petrochemical plant
- Steelworks
- Power supply work

Specification

Model	SI-301
Size	194mm(W) X 152.4mm(D) X 136mm(H)
Weight	4Kg
Operating voltage	DC : 24V \pm 10% PoE : 36V~57V (Typical : 48V)
Flow rate	100 ~ 1,000ml (Normal 300~500ml / min)
Power consumption	Approximately 5.0W
Measurement display	FND, gas concentration, flow rate, alarm, device faulty
Relay	Low Alarm, High Alarm, Fault Alarm
Analog Output signal	4-20mA
Digital communication	RS-485, TCP Ethernet
Sampling distance	Length of input gas tube: up to 30m (FEP tube) Length of exhaust gas tube: up to 30m (FEP tube)
Input/Output tube	1/4" Teflon tube
Operating temperature	-40°C ~ 55°C
Certification	KCs: Ex db IIC T6 Gb
IP	IP 65 (KS C IEC60529:2013)
Control/Set	4 Button & RS485 & Ethernet & Bluetooth
Warranty period of the device	2 years
Warranty of sensor cartridge	1 year
Remote interface	Ethernet , RS-485, HART(Optional)
Wiring	4 to 20mA / DC power / Relay : up to 14 AWG
Pressure range	90 to 110kPa
Maximum sample flow	Max. 1,000 ml
Maximum sample pressure	6kPa

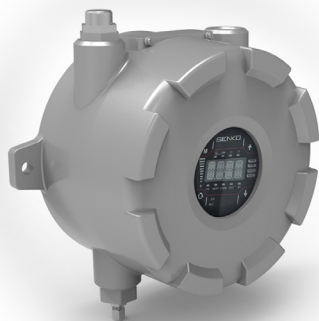
SI-301 Detectable Gases	
Gas Name	Chemical Formula
Oxygen	O ₂
Carbon Monoxide	CO
Sulfur Dioxide	SO ₂
Hydrogen(ppm or %LEL)	H ₂
Hydrogen Sulfide	H ₂ S
Methane(Catalytic)	CH ₄
Methane(IR)	CH ₄
Ammonia	NH ₃
Acetylene	C ₂ H ₂
Ethanol	C ₂ H ₆ O
Toluene(Catalytic)	C ₇ H ₈
Toluene(IR)	C ₇ H ₈
Chlorine	Cl ₂
Carbon Dioxide	CO ₂
Hydrogen Chloride	HCl
VOC	VOC
Xylene	C ₈ H ₁₀
Hydrogen peroxide	H ₂ O ₂
Nitrogen Dioxide	NO ₂
Ethylene oxide	C ₂ H ₄ O
Ethylene	C ₂ H ₄
Nitrogen Monoxide	NO
Hydrogen fluoride	HF

*Please contact us for gases not listed in the table.

SI-310

Fixed Gas Detector (Sampling type with the built-in pyrolyzer)

SENKO



Description

SI-310 is a built-in pyrolyzer sampling type fixed gas detector to easily detect Hexafluorobutadiene, Octafluorocyclopentene, Difluoromethane and Fluoromethane gases through a sensor cartridge on a real-time basis. The measured gas concentration is transmitted in real time with an output of 4-20 mA and can be configured through three internal relays. In addition, users also can widely benefit from control set of RS-485/ Ethernet/Bluetooth connection.

Key Feature

- Explosion-Proof structure
- Cartridge type sensor – Easy maintenance
- Built-in flow control function
- Large LCD with Digital Concentration Indication and Digital Flow Indication
- Control set of 4 Button / RS485 / TCP Ethernet / Bluetooth

Applications

- Semiconductor industry

Specification

Model	SI-310
Size	212mm(W) X 225mm(D) X 141.7mm(H)
Weight	6.5Kg
Operating voltage	DC : 24V \pm 10% PoE : 36V~57V (Typical : 48V)
Flow rate	100 ~ 1,000 ml (Normal 300~500ml / min)
Power consumption	Approx. 15.0W @ +24VDC (Pyrolyzer Use 600mA@+24Vdc)
Measurement display	FND, gas concentration, flow rate, alarm, device faulty
Relay	Low Alarm, High Alarm, Fault Alarm (Rated 2.0A @ 30Vdc)
Analog Output signal	4-20mA
Digital communication	RS-485, TCP Ethernet (PoE)
Sampling distance	Length of input gas tube: up to 30m (FEP tube) Length of exhaust gas tube: up to 30m (FEP tube)
Input/Output tube	1/4" Teflon tube
Operating temperature	-40°C ~ 60°C
Certification	KCs: Ex db IIC T6 Gb
Control/Set	4 Button & RS485 & Ethernet & Bluetooth
Warranty period of the device	2 years
Warranty of sensor cartridge	1 year
Remote interface	Ethernet (PoE), RS-485, HART(Optional)
Wiring	4 to 20mA / DC power / Relay : up to 14 AWG / Ethernet : RJ-45 Cat.5E
Pressure range	90 to 110kPa
Maximum sample flow	Max. 1,000 ml
Maximum sample pressure	6kPa

SI-310 Detectable Gases	
Gas Name	Chemical Formula
Hexafluorobutadiene	C ₄ F ₆
Octafluorocyclopentene	C ₅ F ₈
Difluoromethane	CH ₂ F ₂
Fluoromethane	CH ₃ F
dichloroethylene	C ₂ H ₂ Cl ₂

*Please contact us for gases not listed in the table.

SI-100IS

Receiver For Fixed Gas Detector (Bar-Graph type)

SENKO

Description

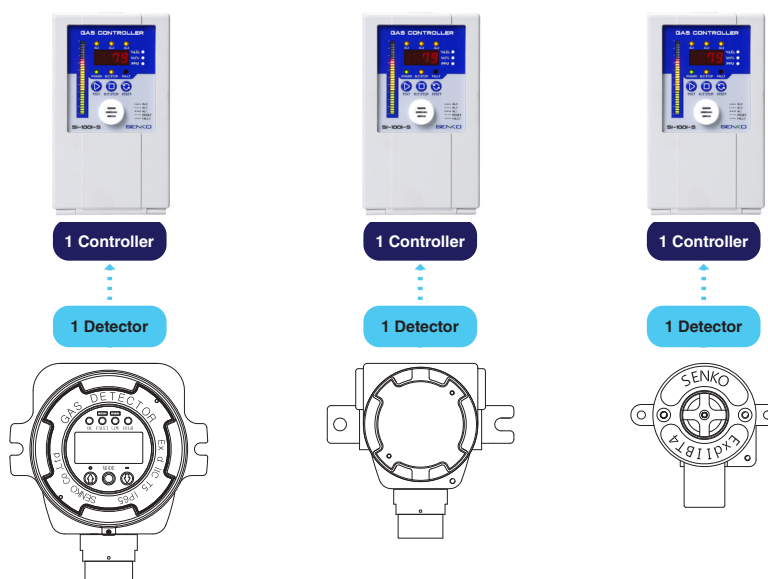
SI-100IS is a single control panel and an alarm for fixed gas detector and fixed gas leak detector composed of sensing part and receiver. It is designed as DIN type and so can be installed as wall mount panel. Performing calibration is processed from a detector and can also perform from the SI-100IS itself.

Key Feature

- Sophisticated design and simple structure
- Display using the Bar-Graph depend on alarm steps. (1st, 2nd, 3rd Alarm)
- 3 Colored LED and F.N.D gas concentration display
- Easy zero calibration and built-in calibration mode
- Self test mode
- Display the number of calibrations
- Built-in light bar (Option)

Specification

Model	SI-100IS
Measuring range	Programmable within detection range
Display	30-Bar graph, 3 Alarm LED, 3 Status LED, 7-Segment(4Digit)
Sound	buzzer(Alarm1,2,3, Reset, Fault), 80dB
Operation mode display	3 Alarm LED, 3 Status LED
Measuring value display	30-Bar graph, 7-Segment(4Digit)
Alarm level set	Alarm1,2,3 Programmable within detection range
Alarm signal output	Alarm 1,2,3 - 12V.DC, Dry contact (com, no, nc), comm 12V.DC, Dry contact(com, no, nc)
Input Signal	4/20mA signal
Cable/Distance	CVVSB 1.5sq or AWG20 × 3wire (Power + Signal) / 2,500m max
Mounting type	Wall mount
Program set mode	ALARM1,2,3, Range, 4-20mA Calibration etc.
Operating temperature	-20°C ~ +50°C
Operating humidity	5%~95%RH(Non-condensing)
Operating power	100~240V INPUT AC (50/60Hz), <0.24A
Material	ABS AF308
Dimensions	120(W) × 200(H) × 51(D)mm
Weight	0.5kg



SI-100IM

Multi Channel Gas Monitor for Fixed Gas Detectors **SENKO**

Description

SI-100IM consists of a Main Alarm unit and Alarm display units. From the one main unit, the alarm display unit can be constructed from 1 to 36 units. SI-100IM is designed as DIN type, so the device can be manufactured in the wall mount panel type, Standalone type, or 19" Rack type according to a user's preference.

Key Feature

- Sophisticated design and simple structure
- 4Digit F.N.D Digital Display
- 40 LED Bar Graph (% , PPM, LEL unit display)
- Fault, 1st, 2nd, 3rd Alarm Icon
- 40 Red Arrow LED Graph(<) Display
- Easy zero and standard gas calibration
- Self Diagnosis mode
- Display the frequency of calibration
- Back-up Battery installed
- Data Recovery function



Specification

Model	Main Alarm Unit	Alarm Display Unit
Model No	SI-100IM	SI-100IA
Measuring Range	0-30V FND Digital Display	0.000 to 9999 Digital User Setting
Measuring Display	4Digit FND Digital Display 18 LED Bar Graph, Battery, B/Z Stop (V Unit Display)	4Digit F.N.D Digital Display 40 LED Bar Graph (% , PPM, LEL Unit Display)
Alarm Display	Fault, 1st, 2nd, 3rd Alarm ICON AU01~AU10 (Alarm Unit, indicating in order)	Fault, 1st, 2nd, 3rd Alarm ICON 40 Red Arrow LED Graph(<)
Alarm Sound	Buzzer 92dB	
Input Signal		4-20mA Full Scale
Output Signal	1st, 2nd, 3rd Relay Dry Contact, 12V. DC	Fault, 1st, 2nd, 3rd Relay Dry Contact, 4-20mA, 12V.DC
Accuracy		FND Digital $\pm 1\%$ Full Scale or 1Digit (Whichever is greater)
Alarm Set	depend on configuration of SI-100IA	1st, 2nd, 3rd Alarm Setting 40 Red Arrow LED Graph(<) Setting
Alarm Reset	Manual Total Reset & HMI	Manual Local Reset
Self Test	Battery Test Switch (AC/DC)	Test Switch (0~Max Range 10sec)
Scan Time	10ms	10ms
Back-Up Battery	Ni-Cd Battery 18V 600mA (3, 6Channel)	
Operating Power	110/220V.AC 50/60Hz (or 24V.DC)	
Temperature / Humidity	-20°C ~ 60°C, 95%RH	-20°C ~ 60 °C, 95%RH
Dimensions	Main Channel Card : 40(W) × 130(H) ×104(D)mm	Alarm Channel Card : 40(W) × 130(H) ×104(D)mm
Operating in/out	RS-485 Modbus (SI-100ICU)_Option	
Total Weight & Dimensions	3CH : 7.3kg, 6CH : 10kg Wall Mount Panel 3CH : 278.5(W) × 450(H) x115(D)mm Wall Mount Panel 6CH : 398.5(W) × 450(H) x115(D)mm	
Option	Built-in light bar	

SI-200I

Single Receiver with Built-in Battery

SENKO



Key Feature

- Single Receiver
- Self-diagnosis function
- 4Digit BIG FND display
- DC 4-20mA / RS-485 signal output
- LED and Relay contact output
- Alarm value and delay time can be set
- Built-in Li-ion Battery
- Wall mounting type
- Peak hold

Applications

- Steel mill
- Petrochemical, Oil refinery
- Shipbuilding yard
- Wastewater treatment facilities
- LPG tank facility
- LNG gas facility



Specification

Model	SI-200I (MONITORING PANEL)
Measuring Output	Big FND display(for measured value (4-digit)), 9-LED
Enclosure	Non-explosion Proof type
Detectible Gas	All applicable gases (for SI-100, SI-100C, SI-100D models)
Measuring Display	4-digit big digital FND
Measuring Range	0.000 to 9999 Digital user setting
Accuracy	Digital FND, $\pm 1\%$ +1 digit of full scale
Input Signal	4-20mA Full Scale
Operation Temperature	-20 to 50 °C
Operation Humidity	5 to 99% RH (Non-condensing)
Output Signal	"DC 24 V / DC 4 - 20 mA / RS-485 modbus Check output: 3 mA / Calibration output: 3 mA / Fault output: 0 mA"
Alarm display	"Visual indication: 3-alarm, trouble, BATT, B/Z STOP, RESET (LED), warning light Audible indication: Buzzer signal (85 dB)"
Relay contact	AC 250V / 3A (Alarm1, Alarm2, Alarm3, Fault)
Power Supply	INPUT : 100~250V.AC / 18~31V.DC (280mA Max)
Back-Up Battery	Li-ion Rechargeable Battery, 7.3V, 2,850mAh
Battery display	Battery error indicator LED, operating time FND
Battery Operating Time	1-2 hour or more
Cable	Standard type : (CVVS or CVVSB 1.5sq↑)+Shield
Cable Connection Length	"4 - 20mA DC Signal : 2,500m RS-485 Modbus Signal : 1,000m"
Mounting type	Wall mounting type
IP code	IP65
Dimensions& Weight	235.6(W) × 355.5(H) × 109.3(D) mm / 1.75kg

Indoor CO2 monitor

Carbon Dioxide Gas monitor



Description

Indoor CO2 monitor is the most reliable air quality monitor. It analyzes CO2, Temperature, Humidity continuously to help you maintain a healthy and comfortable environment. CO2 gas is colorless and odorless, it classified as a toxic gas which may cause asphyxia and narcotic effects. A fresh, clean air environment also increases productivity and strengthens the immune system.

Key Feature

- Reliable monitoring of indoor air quality(CO2/Temp/Humi)
- Real-time air quality measure
- High quality sensor
- Connect wirelessly to your smartphone via Bluetooth, compatible with most Apple, Samsung and Google device
- Portable & durable
- Increased productivity, reduced fatigue

Specification

Model	Indoor CO2 Monitor
Measuring Range	360ppm ~ 5,000ppm
Battery	Rechargeable Li-ion power (400mA)
Operating temperature	-10°C ~ 40°C
Operating humidity	10% ~ 90%
Interface	Bluetooth® 5.0
LED display	Green Lamp : 360ppm ~ 999ppm Yellow Lamp : 1000ppm ~ 1499ppm RED Lamp : 1500ppm ~ 1999ppm Red Blinking : 2000ppm ~ 5000ppm

- Design can be changed



BMC-2000

Breath CO Monitor

SENKO

CE



Description

BMC-2000 can be used in smoking cessation programs by healthcare professionals. And it also can be used as a noninvasive method to get %COHb in the patient's blood and to screen CO poisoned patients by medical man. The small size and light weight make the BMC-2000 ideal for hand held use. It is mainly used in smoking cessation clinics; it is used for instructional purposes to check on the client's progress and compliance.

Key Feature

- Non-Invasive method to know how much carbon monoxide(CO) poisoned
- Indirect and simple instrument to measure carboxyhemoglobin (COHb) in blood
- Easy to discriminate smoker
- Easy to recognize the degree of CO poisoning (smoking habit)
- Two languages (English, Korean) are provided
- CE certificate of European medical equipment
- Concentration of CO in breath and percentage of COHb in blood are displayed simultaneously
- Adult / Pregnant / Young mode are provided
- Manage analysis data through software



Specification

Model	BMC-2000
Measuring gas	CO
Measuring type	Breath through the mouth
Measuring method	Electrochemical cell
Measuring range	0~100ppm, 0~500ppm
Countdown	15 seconds
Accuracy	±5%/Full scale or 1ppm
Hydrogen cross sensitivity	5~10% / Full scale
Resolution	1ppm
Parameter Control	Front 3 switch(calibration, maintenance, configuration setting)
Operation mode display	Visual : Graphic LCD Display, LED Indicator Audible : buzzer
Measuring value display	Graphic LCD Display
LED indicator	7 Steps (Green/Amber/Red)
Reset signal	Auto Power OFF
Mounting type	Pocket, Hand carry
User mode	Adult / Adolescent
Program set mode	Language(Korean, English), Age, Sound, Calibration
Operating temperature	0°C ~ +40°C
Operating humidity	5 to 95%RH(Non-condensing)
Mouthpiece adapter	D type bacteria filter
Disposable mouthpiece	Diameter 22mm
Material	PC+ABS
LCD size	50(W) × 30(H)mm
Dimensions	74(W) × 140(H) × 42(D)mm
Weight	160g



Electrochemical Gas Sensor



	O2	O2	CO	H2	H2S	Hydro Carbon, CO2 etc
Model	SS1118	SS2118	SS2128	SS2178	SS2198	IR sensor
Performance Characteristics						
Nominal Range	0~100%	0~30%	0~2,000ppm	0~1,000ppm	0~100ppm	Depends on type of the gas
Maximum Overload	-	-	5,000ppm	2,000ppm	550ppm	
Output Singnal	6.0± 1.0mV	90± 20μA@/20.9% O2	70±20nA/ppm	15±10nA/ppm	700±200nA/ppm	
Resolution	0.1%	0.1%	0.5ppm typical	2ppm	< 0.1ppm typical	
T90 Response Time	≤ 15sec	≤ 15sec	≤ 25sec	≤ 30sec	≤ 20sec	
Typical Baseline Range (pure air)	-	-	≤±2ppm CO equivalent	0 to 30ppm	≤±2ppm H2S equivalent	
Filter Capacity	-	-	-	-	-	
Recommended LoadResistor	-	100Ω	10Ω	10Ω	10Ω	
Repeatability	2% of signal	2% of signal	≤±2ppm CO equivalent	2% of signal	≤±2ppm CO equivalent	
Output Linearity	Linear					
Positon Sensitivity	None					
Bias Voltage	Not required					
Weight	7g	18g	6g	6g	6g	15g
Environmental						
Temperature Range	-20°C ~ +50°C					
Pressure Range	Atmospheric ±10%					
Relative Humidity Range	15~90% RH					
Maximum Zero Shift (+20°C to +40°C)	-	-	-2 to 3ppm	-20ppm equivalent	0.2ppm equivalent	
Life Time						
Long Term Output Drift	Less than 5%/year					
Storage Life	6months					
Storage Temperature	0~20°C					
Expected operating Life(years)	< 2years	< 2years	> 2years	> 2years	> 2years	
Warranty Period	2years					



NH3	NO2	2ECO	CO / H2S (Dual sensor)		Ethanol	Formaldehyde
SS21N8	SS2148	SS2128_B	SS21CH		SS21A8	SS21F8
0-100 ppm	0-20 ppm	0-1,000ppm	0-500ppm CO	0~100ppm H2S	0-1,000ppm	0-1,000ppm
200 ppm	40 ppm	2,000ppm	2,000ppm CO	500ppm H2S	2,000ppm	2,000ppm
100±30nA/ppm	- 220±50nA/ppm	60±20nA/ppm	80±20nA/ppm	775±275nA/ppm	25~40nA/ppm	200±50nA/ppm
< 1 ppm typical	< 0.1 ppm typical	≤0.5ppm typical	≤0.5ppm typical	≤0.5ppm typical	≤0.01ppm typical	≤1ppm typical
<30sec	<30sec	<20seconds	<30seconds		<20seconds	<60seconds
±2ppm NH3 equivalent	±1ppm NO2 equivalent	≤±2ppm CO equivalent	≤±2ppm CO	≤±0.5ppm H2S equivalent	≤±2ppm	≤±2ppm
-	-	≥20,000ppm hours	-	-	-	-
10Ω	10Ω	10Ω	10Ω	10Ω	10Ω	10Ω
<±10%	<±5%	≤±2ppm CO equivalent	≤±3% CO	≤±2% H2S equivalent	≤±2%	≤±3%
Linear		Linear up to 2,000ppm	Linear			
None						
Not required						
6g	6g	7g	18g	6g	6g	6g
-20°C ~ +50°C						
800 to 1200 mbar	800 to 1200 mbar		Atmospheric ±10%			
15~90% RH						
± 2ppm equivalent	± 1ppm equivalent	-	-	-2 to 3ppm	-20ppm equivalent	0.2ppm equivalent
Less than 10%/year	Less than 10%/year			Less than 5%/year		
6months						
0~20°C						
> 2years	> 2 years	< 2years	< 2years	> 2years	> 2years	> 2years
2years						

MEZUS Series

Air Quality Monitoring System

SENKO

KENTEK

KENTEK specializes in the production of environmental analyzers for air pollution, indoor air quality, odor and flue gas emissions. KENTEK has achieved the environmental certificates of CEP(China) and EPA(USA) and we are ready to meet your global standard and analyze pollution and offer solutions to protect the environment.

Specifications



Gas Analyzer

Customize gas type in your Monitoring system



Particulate Monitor

PM10, 2.5 Analyzer



MEZUS 510

Calibrate your Analyzer with Multigas Calibrator



MEZUS 520

Supply Zero Air for accurate Calibration

Gas Analyzer	
Ranges	0~0.1/0~0.5/0~1ppm (selectable) (SO ₂ /NO _x /O ₃ /H ₂ S)
	0~50/0~100ppm (selectable) (CO)
	0~500/0~1000/0~2000/0~5000ppm (selectable) (CO ₂)
Lower detectable limit	0.5ppb (SO ₂ /NO _x /O ₃ /H ₂ S)
	0.05ppm (CO)
	0.2ppm (CO ₂)
Zero drift	1ppb (SO ₂ /NO _x /O ₃ /H ₂ S)
	0.1ppm (CO)
	0.25ppm (CO ₂)
Span drift	1% Full scale
Linearity	1% Full scale
Sample flow rate	0.5~1 liter/min
Operating temperature	5~40°C
Size	506mm(W) x 900mm(H) x 392mm(D)

Particulate Monitor	
Measurement type	PM10, PM2.5 and EC/OC
Ranges	0~1000mg/m ³ to 0~5000mg/m ³
Source	Carbon -14(C14) <100uCi
Lower detectable limit	<4mg/m ³ (1 hour)
Measurement cycle	5 minutes to 1 hour
Sample flow rate	Stabilized flow control by 16.7 litres/min

	MEZUS 600	MEZUS 610
Display	5inch TFT-LCD & Touch Screen	7inch TFT-LCD & Touch Screen
MCU	i.MX6S-800Mhz @ Cortex-A9	S3C6410-667Mhz @ ARM11 SoC
Size (mm)	380(W) x 370(H) x 243(D)	480(W) x 350(H) x 368(D)
Weight	10.5kg (Portable type)	19kg (19" Rack mountable)

MEZUS 510	MEZUS 520
Multigas Calibrator	Zero Air Generator
UV Photometer (0~0.1 to 0~1ppm)	Internal Membrane air dryer
Optional O ₃ Generator Module	Internal Pump (Output 20SLPM @30 psig)
7inch TFT-LCD Touch Screen Interface	Automatic Pump Control
Ethernet, RS-232, RS-485, USB port	Automatic Water drain
Temperature & Pressure compensation	Scrubber for SO ₂ , NO, NO ₂ , O ₃ , H ₂ S and NH ₃

SENKO

SENKO Co.,Ltd. was founded in 2004 and has developed Gas detector, Gas monitoring system based on our own Gas sensor technology. Now, SENKO is producing more than 12 gases sensor with various physical structure.



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