

## MGT Multi Gas Detector

The MGT portable multi gas detector is used for **detection of flammable gases, oxygen depletion & presence of toxic gases**, for meeting the safety monitoring requirements of a broad range of different industries and utilities.

The MGT is utilised for detection and monitoring of gas concentration of 4 gases at a time namely Oxygen, Carbon Monoxide, Hydrogen Sulphide and combustible gas simultaneously on the LCD display of the instrument, in real time, to ensure that your workers feel safe and that you maintain safety compliance.

Oxygen is displayed in %vol, combustible gases in %LEL and H<sub>2</sub>S, CO in PPM unit.

Generally, oxygen concentration level should be 20.9% vol ; accordingly, instrument provides a range of 0~30%, whereas oxygen 19% (low) < x > 23% should be considered as alarming.

Similarly, Carbon Monoxide (CO) being a poisonous gas – values above 70ppm cause headaches, nausea and sustained values above 150 ppm to 200ppm can cause unconsciousness and death ; accordingly instrument provides a CO detection value of 0 ~500ppm. Combustible gases are measured for 0~100%LEL value

**Applications include:** Steelworks, Petrochemical plant, Ship building yard, Sewage treatment plant, Mines, Power supply works, Hemetically sealed area (manhole, tank) , Gas utilities & telecom works.

### Features :

- Continuous display of real time gas concentration ; when levels exceed threshold , display icons as below will blink and the instrument will alert the operator.
- LOW : minimum gas concentration detected by the device
- HIGH : maximum concentration detected by the device
- TWA (Time Weight Average) : Acceptable hourly average exposure levels of the toxic gases for the last eight hours
- STEL (Short Term Exposure Limit): Acceptable average exposure levels of the toxic gases for the last 15 minutes provide a triple ALERT
- Alert options: Easy and simple to operate, the device provides a triple ALERT by Audio Buzzer Alarm, Bright LED light and Vibration when the concentration exceeds the safety gas levels in addition, provides alerts an readings on LCD display.
- Datalogging of upto 30 events. Data log records the operation status of every second.
- Self test: instrument contains a self test feature which allows the operator to self test the instrument motor, buzzer, LED, LCD, memory etc prior use.
- Calibration: calibration should be done regularly every six months. Instrument logs date of calibration, calibration gas concentration etc.



## Specifications :

<b>Measure Gas</b>	Combustible	O <sub>2</sub>	CO	H <sub>2</sub> S
<b>Detecting Method</b>	Diffusion / Sampling(with Sampling Pump(option))			
<b>Measure Mechanism</b>	Catalytic (MGT-P) NDIR (MGT-N)	Electrochemical	Electrochemical	Electrochemical
<b>Range</b>	0~100 %LEL	0~30 %vol	0~500 ppm	0~100 ppm
<b>Sensor life</b>	> 5 years	< 2 years	> 2 years	> 2 years
<b>Response Time</b>	< 15sec/90%scale	< 15sec/90%scale	< 30sec/90%scale	< 30sec/90%scale
<b>Accuracy</b>	± 3%/ Full Scale			
<b>Resolution</b>	1%LEL	0.1 %vol	1 ppm	0.1 ppm
<b>Operation</b>	Push Button Key			
<b>Alarm Via Visual Audio</b>	LCD backlit display, Indicator LED Buzzer alarm (dB at 10 CMS), Vibration			
<b>Data Logging</b>	30 Events (FIFO), Calibration log, Bump test log			
<b>Temp &amp; Humidity</b>	-20°C ~ +45°C, 10 to 95% RH(Non-condensing)			
<b>Battery Type</b>	Manufacturer: SAMSUNG SDI, Product Name: ICP103450S, Type: Lithium-Ion Charger Nominal Voltage : 3.7V , Nominal Capacity: 2000mAh , Max Charging Voltage: 6.3V			
<b>Battery Duration</b>	(MGT-P : 24 Hours, MGT-N : 2 Months)			
<b>Case</b>	Rubber-base PC Case			
<b>Size &amp; Weight</b>	(W x D x H) 60 x 40 x 118mm, 240 g			
<b>Options</b>	SP-PUMP101 (Sampling pump), SENKO IR-LINK, Docking-Station			
<b>Certification</b>	MGT-P : Ex d ia IIC T4, IP 67, MGT-N : Ex ia IIC T4, IP 67, CE			
<b>User configurable</b>	Bump test interval, calibration interval, initial setting concentration levels for calibration (*if IR Link is purchased)			

## Options :

- Standard gas calibration: Send back your instrument to Stanlay for standard gas calibration; In case you have purchased a larger quantity of instruments, consider purchase of docking station which holds gas inside to perform simple automatic calibration of instruments.
- SENKO IR Link: each instrument is provided pre-set with min-max values as per international standards; the setting values can be modified through SENKO IR Link option , which can be purchased separately if you have purchased a larger quantity of instruments. Alternatively, you can ask Stanlay to do so for you.

## Compatible options:



**Optional Sampling pump:** an external sampling pump can be ordered with the instrument, if required.