



SST-4

Sales Playbook

Introduction & Agenda



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Our Story



We are WatchGas; ***We watch gas where you can't.***

We strive to be the best at everything we do, from the products we innovate to the way we work and support our partners. Focusing on these core values while other manufacturers focus on profit will make us a worldwide brand for all your gas detection needs.

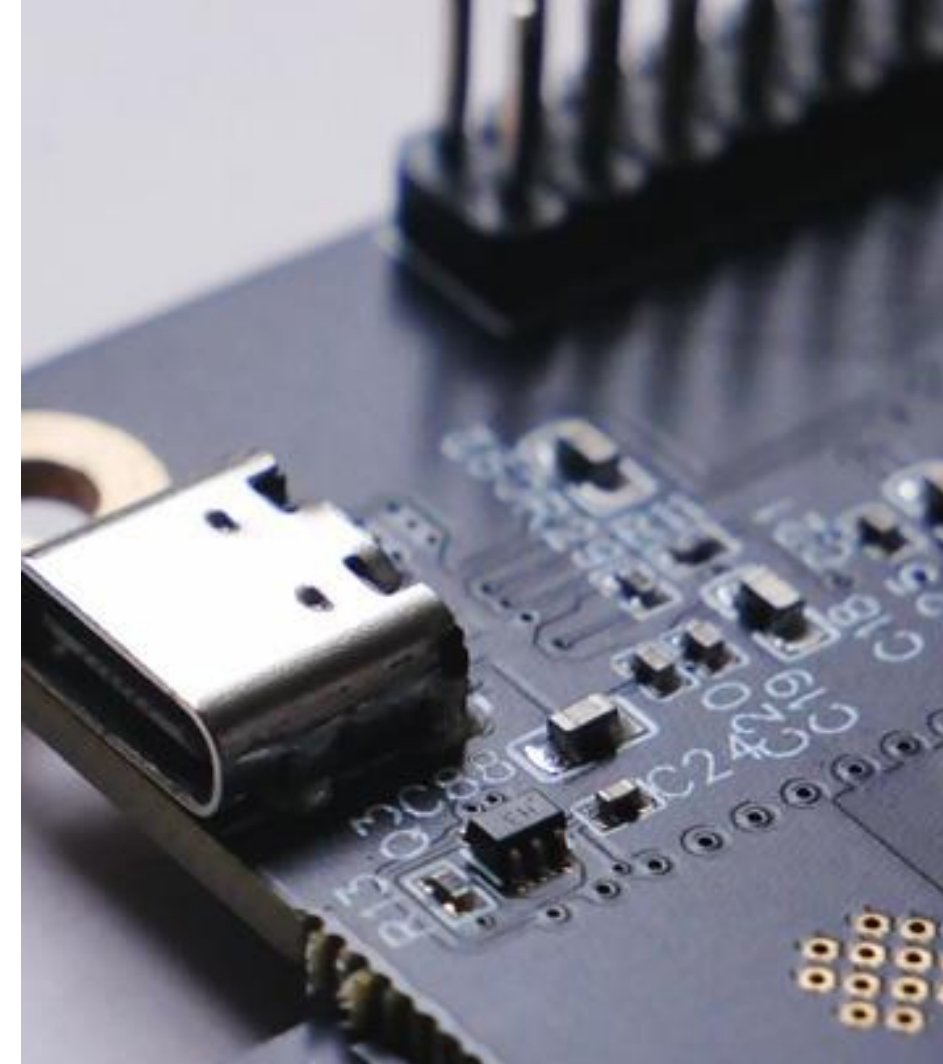
Established in 2018 in Rotterdam, the Netherlands, we manufacture gas detection devices. After the success of the first phase we have developed a range of portable devices to serve a global market, starting in 2023. Our passion is gas detection, and our dedication is with keeping you safe. We Watch Gas to make sure you come home safely every day.

“OUR MISSION IS
TO BUILD THE BEST
PRODUCTS, SHARE
OUR KNOWLEDGE
OF THE GAS
DETECTION INDUSTRY
WHILE PUTTING OUR
CUSTOMERS AT THE
HEART OF ALL WE DO.”

Growth through Design

At WatchGas, the design of our products is fundamental to who we are, to the customers and markets we currently serve, and to those who use an alternative solution as of today. Our product strategy is to innovate and clearly define, develop, and sustain our product portfolio to give our partners and customers the best solution for their gas detection needs.

With our Product Development Team being based in Rotterdam (the Netherlands), we are proud of the knowledge and experience that we attract. One of our key pillars is innovation; as part of this commitment, we promise to release new products every year, ensuring a diverse range of gas detection solutions. These could be a complete New Product Introduction (NPI) or a sensor or technology that supports a new or developing application, market, or process, such as the hydrogen space or the need for fumigation.



Introducing the New Standard in Multi-Gas

The SST4 Micro & SST4 Mini: Four-gas diffusion multi-gas. Over the last decade, there has been a shift from single-gas devices to multi-gas devices that will protect you and your employees from the common gases found in industries. With over 2.6 million multi-gas devices sold yearly, there is an opportunity for a greater user experience and sensing technologies that create a safer environment.

The Voice of the Customer (VoC) work done while developing our four-gas range gave us a good insight into what customers really wanted. Those top five requirements are fast detection of gas, clear visible display, robust design for harsh environments, loud audible alarm, and a good supporting ecosystem such as software and docking stations.

While some devices did some of the above requirements, none addressed all these pain points. The WatchGas team has listened to those requirements and is excited to present the new SST Range.





Overview

SST4 Series Overview

Overview

Innovative 1- 4 gas series of diffusion and pumped portable gas detectors. Built on decades of experience.

Key Differentiators

- Accelerated Worker Evacuation (54% faster response time)
- Automated Compliance Delivered Economically
- Cost Effective Operational Efficiency

Detection Type

- Solid Polymer Toxic & Oxygen
- LPC, IR & CAT Combustible

Gasses

- O₂, LEL, CO, H₂S, SO₂ (up to 4)

Use case

- Diffusion protection, Confined space entry, Leak detection

Operating Conditions

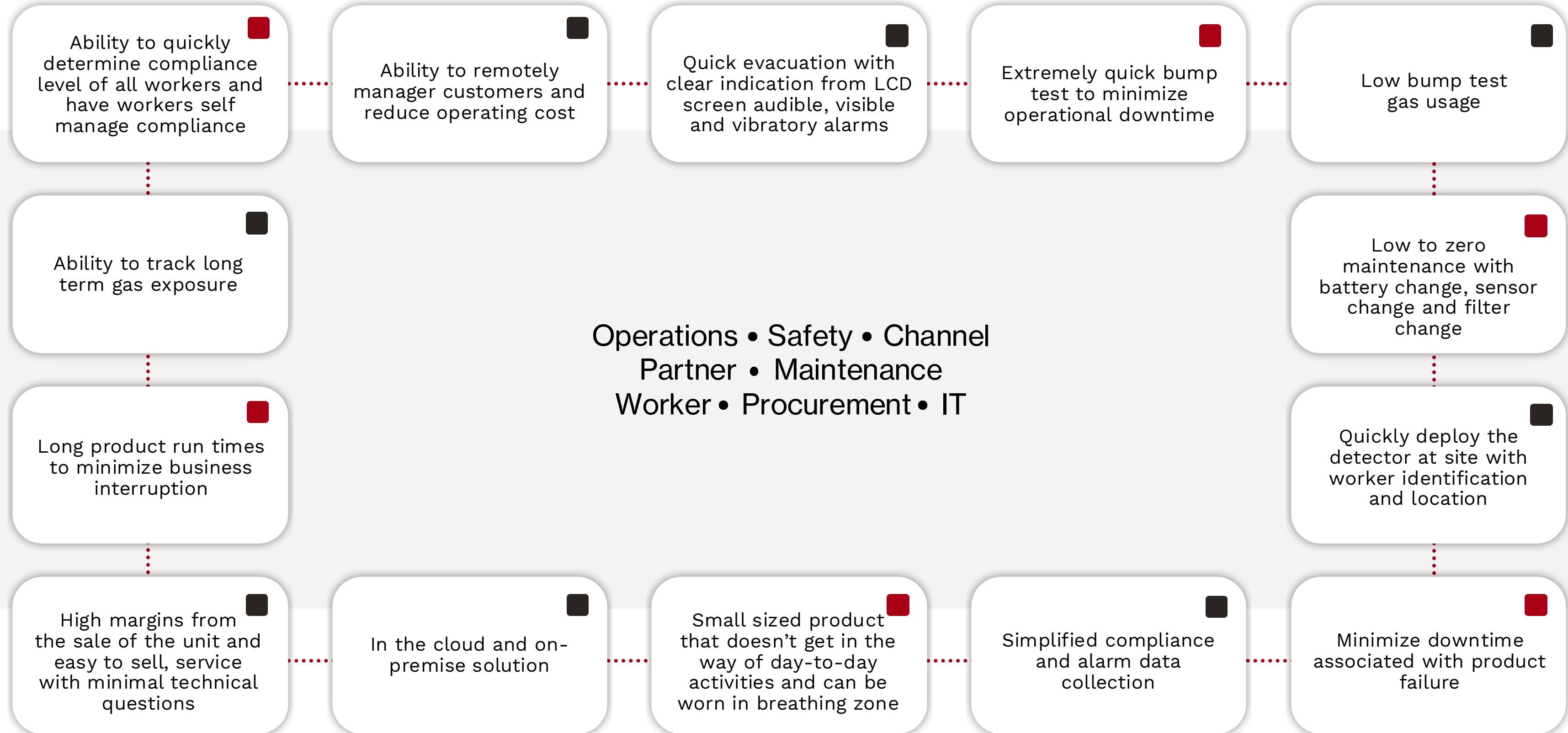
- -40 to +60°C / -40 to +140°F (pumped -20 to +60°C / -4 to +140°F)
- 5% - 95% non-condensing Relative Humidity



Customer Needs



Decision Maker & Influencer



Decision Maker & Influencer



Operations Manager / COO

Key Decision Maker

Focus: Efficient operations and Cost savings

What they value:

- Efficient operation/no downtime
- Low cost of ownership
- Safely operate and maintain plant
- Compliance to permits

Procurement

Influencer

Focus: Responsible for selecting products and companies.

What they value:

- Specifications that meets **Project Requirements**
- If they understand the advantage of the watchgas solution they can be an ally especially the gas bottle level measurement

HSE Manager / Safety Officer / IH

Key Influencer / Decision Maker

Focus: Safe Operations

What they value:

- Proactive approach driving to zero incidents
- Public and worker welfare
- Plant safety
- Safety compliance
- Report of findings or events

Maintenance

Influencer

Focus: Responsible for maintaining equipment on site.

What they value:

- Long lasting equipment that is easily maintained.
- If they understand the advantage of the RTR solution and its advanced product monitoring they can be an ally in the selection process.

Decision Maker & Influencer



Information Technology

Influencer

Focus: Efficient data management and technology infrastructure.

What they value:

- Security protection
- Easy IT installation
- On premise and cloud solutions
- Easy data integration

Worker

Influencer

Focus: Safe working environment.

What they value:

- A detector small enough that it can be worn without affecting their job
- No false alarms
- Very loud alarms with vibration for high noise areas and bright LEDs alarms for low light areas.

Channel Partner

Key Influencer

Focus: Increasing revenue and managing end users effectively.

What they value:

- Solutions that offer innovation to the end users and higher revenue with higher margins for the channel partner.
- Easy to sell
- High quality

Vertical Markets & Segments



Target Verticals & Segments



Verticals	Segments	Gas Dangers
Oil and Gas	Diffusion Protection - Confined Space entry - Rental	LEL, O ₂ , CO, H ₂ S, SO ₂
Utilities – Natural Gas, Power generation – Electrical	Diffusion Protection - Confined Space entry - Rental	LEL, O ₂ , CO, H ₂ S
Telecommunication	Diffusion Protection - Confined Space entry	LEL, O ₂ , CO, H ₂ S
Marine	Diffusion Protection - Confined Space entry - Rental	LEL, O ₂ , CO, H ₂ S
Construction	Diffusion Protection - Confined Space entry - Rental	LEL, O ₂ , CO, H ₂ S
Metal production	Diffusion Protection - Confined Space entry - Rental	LEL, O ₂ , CO, H ₂ S
First Responders	Diffusion Protection	LEL, O ₂ , CO
Manufacturing	Diffusion Protection - Confined Space entry - Rental	LEL, O ₂ , CO, H ₂ S
Shipping	Diffusion Protection - Confined Space entry	LEL, O ₂ , CO, H ₂ S

Target Customer Segments



Segment	Challenges	WatchGas Solutions
Mid-Size Industrial Firms	Need for compliance tracking with limited IT support	User-friendly setup with minimal maintenance
H&S Teams in High-Risk Areas	Require visibility over device usage and status	Tap-to-comply features with comprehensive reports
Distributors/Resellers	Desire for flexible, fast-to-market offerings	Modular hardware combined with cloud solutions
Oil & Gas Subcontractors	Need for mobile, rugged solutions	Portable devices with app-based workflows
Utility Providers	Manage remote access and worker rotations	Dock-based systems with detailed reporting
Rental Distributors / Resellers	Short run times and product failure	Long product run times and predictive failure

Applications



SST RANGE™

Smart safety, simplified compliance

WatchGas RTR (Record to Report) unifies all SST Range devices, the SST Dock, and the SST Kiosk into a single cloud-based platform. It gives managers instant, data-driven insight into device status, maintenance needs, and site performance, helping teams work safer, smarter, and more efficiently.

Key benefits

- Ultra fast detection
- Automated compliance
- Instant data capture
- Long term exposure insights

1. Worker Protection Always in the Breathing Zone

The SST1 delivers up to three years of continuous protection without calibration or sensor replacement, removing unexpected downtime and costs. The SST4 series covers multi-gas applications with advanced MEMS and infrared sensors, delivering accuracy in even the harshest conditions. Devices are 50% smaller and lighter than industry averages, ensuring comfort in the breathing zone, and respond up to 200% faster, giving workers precious extra time in emergencies.

2. Compliance Kiosk Distributed Safety

The Compliance Kiosk decentralises safety management. Installed at site entrances, muster points, or contractor check-ins, kiosks allow workers to tap in their devices, verify compliance, and log incidents instantly. In evacuation drills, kiosks have reduced muster confirmation times by over 40%, while delivering digital records straight to management. This distribution eliminates bottlenecks and ensures safety data flows seamlessly across the facility.

3. SST Dock Rapid Calibration, Lower Cost

Calibration is a common bottleneck in plants. The SST Dock performs full calibrations on every SST model and can complete bump tests in just 5–8 seconds, reducing gas use by up to 50% compared to traditional stations. Certificates are generated automatically, while built-in diagnostics monitor gas levels and dock health. All device data is sent to the RTR system for complete visibility. The result: lower operational costs, faster worker turnaround, and significantly less downtime.

4. RTR Software Site-Level Control

The RTR platform captures compliance data and exposures at site level through the use of the SST Kiosk, Dock or mobile app. Dashboards provide daily IOELV values, peak ppm-hour records, alarms and device health. The Star Rating System predicts sensor, battery, and PCB lifespan, turning maintenance into a planned activity rather than a reactive scramble. Audits that once took weeks of paperwork can now be delivered in minutes, with digital records ready at hand.

5. RTR Main Office Global Oversight Across All Plants

For organisations with multiple facilities or rental fleets, RTR provides a centralised Main Office overview. Every site feeds into one dashboard, enabling global comparison of device status, compliance, and worker exposures. Predictive maintenance can be coordinated enterprise-wide, audits simplified, and operational efficiency maximised. One refinery group cut audit prep time from weeks to hours by adopting RTR, while reducing spare inventory through accurate fleet utilisation.

Value



RTR Solution



A seamlessly integrated web-based or on-premise solution that enhances the performance of WatchGas SST gas detectors through automated compliance, intelligent reporting and fleet management—creating optimized safety, proactive maintenance, and operational efficiency.



Automated Compliance - Minimized Business Interruption - Improved Cost Efficiency -
Enhanced Safety - Optimized Customer Management

Overview

The SST4 series of portable gas detectors prioritizes on increasing worker safety and improving worker efficiency.

- Evacuate within a few seconds or complete CSE faster with best-in-class gas sensors that typically respond up to 54% faster than other manufacturers.
- Save thousands of dollars annually in reduced test gas and maximize worker efficiency with best-in-class gas sensors that typically respond up to 54% faster than other manufacturers.
- Industry leading, scratch protected, extra-large display for quick decision making and faster evacuations.



Overview

- Reduced business interruption from solid polymer gas sensors that do not leak electrolyte and cause products to prematurely fail.
- Boost worker productivity with extended run times—up to 200 hours in diffusion versions and 100 hours in pumped version — standard with contactless charging to minimize battery concerns and eliminate frequent recharging.
- Upload all compliance information within a few seconds into the cloud via app, kiosk or SST Dock with a simple tap via NFC technology.



Safety

- Evacuate within a few seconds with best-in-class gas sensors that typically respond up to 54% faster than other manufacturers.
- Accelerate decision-making and evacuation response with the SST4 Micro and Mini, featuring an industry-leading extra-large display—typically 13% larger than competitors—and protected by extended screen bumpers.
- Easily worn in the breathing zone, the SST4 Micro and Mini are typically 43% smaller and 12% lighter than other 4-gas diffusion portable detectors.
- One button operation with simple to use interface.



Safety

- Upload all compliance information within a few seconds into the cloud via app, kiosk or SST Dock with a simple tap via NFC technology.
- Automated compliance with On screen reminders of gas testing, Group coaching with highly visible Compliance indicator that can be seen from a distance and automated compliance reminder emails to operations managers.
- Make safer confined space entry decisions with the SST4 Pump, featuring one of the largest displays in its class for enhanced visibility and clarity.
- The SST4 Pump enhances worker safety with a bottom-mounted tubing connection that helps prevent kinks during confined space entry testing.



Operations

- Save thousands of dollars annually in reduced test gas and maximize worker efficiency with best-in-class gas sensors that typically respond up to 54% faster than other manufacturers.
- Boost worker efficiency with the SST4 Micro and Mini, offering up to 200 hours of runtime and contactless inductive charging—minimizing downtime and eliminating battery concerns.
- Reduced business interruption with gas sensors that do not leak electrolyte and damage PCBs, leak resistant enclosures (IP65/68) that shield electronics from environmental damage and externally replaceable filters for harsh environments.
- Fast charging in 2-3 hours. Ready for a 12 hour shift in under 20 minutes with the SST4 Micro and Mini.



Operations

- Ultra Rugged double shot molded enclosure ensures the product will perform in the harshest conditions.
- Full environmental operation up to +60C and down to -40C where other manufacturers sensors start to freeze and have slower response at -20C with the SST4 Micro and Mini.
- Reduce business interruption in dirty environments with the external filter accessory.
- Industry-leading 4 gas pump runtime of up to 100 hours—up to 300% longer than the category average—enabling more confined space entry monitoring between charges with the SST4 Pump.



SST4 Pump

- Access to hard-to-reach areas with one of the longest sampling distances in its category at 33 metres with the SST4 Pump.
- Conduct up to 50% more CSE pre checks with sensor response times that are one of the best in class.
- One of the lightest and most ergonomic pumped 4-gas detectors available—up to 50% lighter and up to 250% smaller than comparable models with the SST4 Pump.
- Save time and money by using the SST4 Pump for inert atmosphere monitoring instead of using another instrument.



Case Study

Case Study – Worker Evacuation

The Application

Personal protection of industrial workers in hazardous environments.

The Challenge

Workers are breathing toxic gasses while they are waiting for the gas sensor to react and for the detector to alarm. Many toxic gasses are odorless. Some instruments can take over 30 seconds to respond.

The Solution

With solid polymer sensor technology response times are much faster. Up to 53% faster than some gas detectors giving many more seconds to safely evacuate.

Case Study – Worn in Breathing Zone

The Application

Personal protection of industrial workers in hazardous environments.

The Challenge

Multigas gas detectors offer the highest level of personal protection, but they are typically very large and extremely heavy making it impossible to wear in the breathing zone. (6 to 9 inches - 15 to 23 cm from nose and mouth to detector)

The large size and weight also affects the worker from performing their jobs efficiently.

The Solution

With cutting edge designs and extremely small sensor sizes the Micro and Mini are typically 43% smaller and 12% lighter than similar products.

This means workers are more safely protected and the device does not become a burden on them performing their work.



Case Study – Confined Space Entry Monitoring

The Application

CSE attendant monitoring the Confined space while entrants are engaged in work.

The Challenge

Multigas CSE detectors can be quite large and heavy especially when external pumps are attached. This can make holding it for long periods monitoring the Confined Space challenging and distracting.

The displays on detectors are often quite small so it can be challenging to read critical gas alarm information if an evacuation or ventilation is required.

The Solution

With cutting edge designs and extremely small sensor sizes the SST pump are up to 50% lighter and up to 250% smaller than similar products.

This means easier long term CSE monitoring and a safer entry.



Case Study – Long Run Times

The Application

Worker personal protection or CSE attendant monitoring.

The Challenge

Most multi-gas monitors for personal protection last only a few shifts and then require charging. For CSE attendant monitoring some devices cannot last one shift.

In many cases batteries must be exchanged or another monitor is required. This can lead to excessive worker down time or additional costs for extra equipment.

The Solution

With extremely low power sensors CSE can last twice as long and personal protection can occur up to 10x longer or up to 200 hours of runtime.

This means completing more confined space entries and a more productive work crews.

Case Study – Inert Monitoring

The Application

Inert monitoring in industrial applications.

The Challenge

Often work crews are expected to monitor oxygen levels in inert atmospheres where nitrogen or other inert gasses are introduced to reduce the likelihood of fire during maintenance or other activities.

This typically means using specialty equipment.

The Solution

With the SST Pump with inert mode as default the worker can flip between personal protection and inert monitoring without needing another piece of equipment.

This means reduced operating costs not needed another piece of equipment.

Customer Conversations

Safety Conversation



Value Item	Safety manager / Chief safety officer / Safety Specialist	Questions to ask
Quick Evacuation	Evacuate within a few seconds with best-in-class gas sensors response time.	Have you had situations where workers could smell the gas before the detector went into alarm? Are you concerned your gas detectors are not responding fast enough in an evacuation situation?
Large display with protected screen	Accelerate decision-making and evacuation response with the SST4 Micro and Mini, featuring an industry-leading extra-large display—typically 13% larger than competitors—and protected by extended screen bumpers.	Do your portable gas detectors have so many scratches on the screen over time that you can't easily read the display? Is the screen on your detectors so small that during an alarm it's hard to read it quickly in the stressful moment?
Easily worn in breathing area	Easily worn in the breathing zone, the SST4 Micro and Mini are typically 43% smaller and 12% lighter than other 4-gas diffusion portable detectors.	Do your gas detectors get in the way of the team doing their operations because they are so large and bulky? Can the detector be easily worn near the breathing zone (30 cm from the mouth) or are they placed somewhere else due to their size and weight?
1 button operation	One button operation with simple to use interface.	During training and operation is your gas detector hard to understand with too many interface options that are not easily accessible and intuitive?

Safety Conversation



Value Item	Safety manager / Chief safety officer / Safety Specialist	Questions to ask
Full compliance visibility	Upload all compliance information within a few seconds into the cloud via app, kiosk or SST Dock with a simple tap via NFC technology	Are you concerned that you don't have all the compliance information available during an OSHA or corporate site safety audit? How challenging is it getting all the information from the gas detectors especially in remote situations? Are you concerned the workers' manual testing logs are not being kept accurately? Are the workers using the gas detectors?
Automated compliance	Automated compliance with On screen reminders of gas testing, Group coaching with highly visible Compliance indicator that can be seen from a distance and automated compliance reminder emails to operations managers.	Do you find it challenging reminding the work force to bump, calibrate and wear the monitors frequently? Does this take away valuable time from you doing proactive safety at the facility?
Safer CSE	Make safer confined space entry decisions with the SST4 Pump, featuring one of the largest displays in its class for enhanced visibility and clarity	When the CSE attendant conducts the pre-entry check and continuous monitoring, is the gas detector screen large enough for them to make safe decisions?
Increased CSE safety	The SST4 Pump enhances worker safety with a bottom-mounted tubing connection that helps prevent kinks during confined space entry testing	During the CSE process does your team have frequent hose kinking leading to improper sampling? Does this put your CSE entrants in an unsafe situation?

Operations Conversation



Value Item	Operations manager / COO / Procurement Manager	Questions to ask
Low operating costs	Save thousands of dollars annually in reduced test gas and maximize worker efficiency with best-in-class gas sensors response time.	How many thousands of dollars does the corporation spend each year in test gas?
Increased worker efficiency	Boost worker efficiency with the SST4 Micro and Mini, offering up to 200 hours of runtime and contactless inductive charging—minimizing downtime and eliminating battery concerns.	Has there been situations where workers forgot to charge their gas detectors? How much downtime occurred and at what cost?
Reduced Business interruption	Reduced business interruption with gas sensors that do not leak electrolyte and damage PCBs, leak resistant enclosures (IP65/68) that shield electronics from environmental damage and externally replaceable filters for harsh environments.	How much time and money does gas detector failure cause you today? How many extra gas detectors do you purchase in case the ones your team is using fails?
Reduced Business interruption	Fast charging in 2–3 hours. Ready for a 12-hour shift in under 20 minutes with the SST4 Micro and Mini.	Has there been situations where workers forgot to charge their gas detectors? How much downtime occurred and at what cost?

Operations Conversation



Value Item	Operations manager / COO / Procurement Manager	Questions to ask
Lower business interruption	Ultra Rugged double shot molded enclosure ensures the product will perform in the harshest conditions	How often do your gas detectors fail? How much downtime does it create?
Lower business interruption	Full environmental operation up to +60°C and down to -40°C where other manufacturers' sensors start to freeze and have slower response at -20°C with the SST4 Micro and Mini	Do your gas detectors operate properly and safely in all temperatures that your teams work in?
Lower business interruption	Reduce business interruption in dirty environments with the external filter accessory.	Is your maintenance teams replacing filters frequently keeping detector from being used due to the time to maintain them?
Lower business interruption	Industry-leading 4 gas pump runtime of up to 100 hours—up to 300% longer than the category average—enabling more confined space entry monitoring between charges with the SST4 Pump.	How long do your 4 gas pumped gas detectors run? How many more CSE could you do with a solution that has 3× the runtime?

Operations Conversation



Value Item	Operations manager / COO / Procurement Manager	Questions to ask
Increased safety	Access to hard-to-reach areas with one of the longest sampling distances in its category at 33 meters with the SST4 Pump.	Do you have confined spaces that are extremely large? Can you adequately test them?
Lower business interruption	Conduct up to 50% more CSE pre-checks with sensor response times that are one of the best in class.	How many CSE can be performed in one day? Do you feel the process takes too long with waiting for long sensor response times?
Lower business interruption	One of the lightest and most ergonomic pumped 4-gas detectors available—up to 50% lighter and up to 250% smaller than comparable models with the SST4 Pump.	Is your team challenged with using the CSE pump monitors today? Do they find it difficult to hold for long attendant monitoring sessions?
Lower cost of ownership	Save time and money by using the SST4 Pump for inert atmosphere monitoring instead of using another instrument.	Do you use separate meters to do inert atmosphere monitoring? What is the additional cost of purchasing and maintaining these meters? Has there been situations where the inert monitoring meters were forgotten?



Competitive Comparison






Diffusion

Competitive Comparison SST4



Feature	watchgas detection	Honeywell	MSA	INDUSTRIAL SCIENTIFIC	Dräger	gas chip	blacklinesafety	crowcon	RKI INSTRUMENTS
Ultra fast sensor response – Extra Large screen – automated muster check in via NFC - Display protection	●	◐	●	◐	◐	○	◐	◐	○
Induction charging – long runtime – leakless sensors - reduced test time – fast quick charge	●	◐	◐	◐	◐	◐	◐	◐	◐
Reduced test Gas– total COO – sensor replacement costs	●	◐	●	◐	◐	◐	◐	◐	◐
Operates -40C to +60 C with no sensor response affects	●	◐	◐	◐	◐	◐	◐	◐	◐
NFC upload compliance info – testing reminders – visual group coaching	●	◐	●	◐	◐	○	●	◐	◐
Price	●	◐	◐	◐	◐	●	○	○	◐


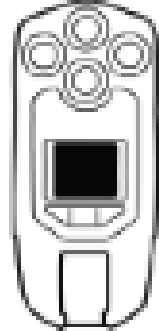
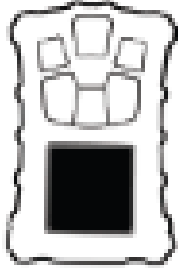
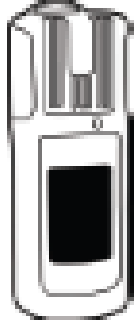

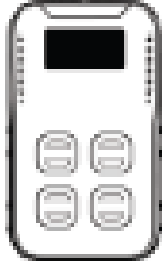
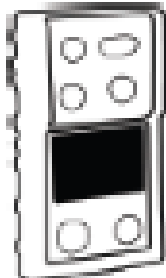
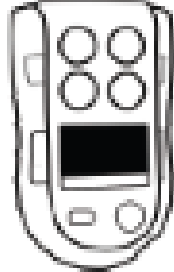

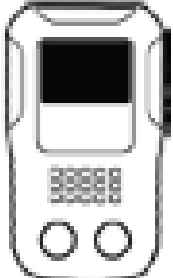
Competitive Specification Comparison

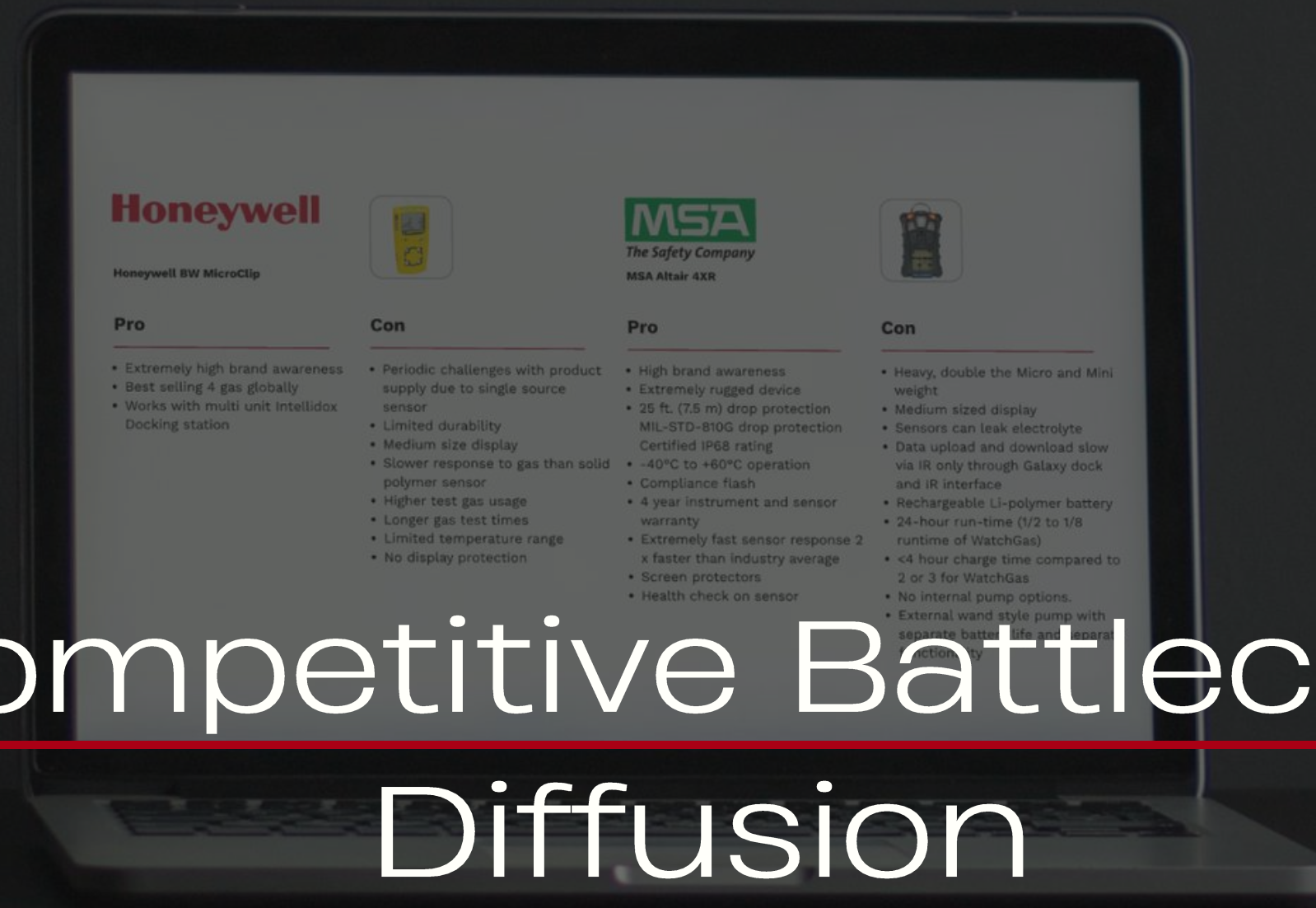
										
Solution Value	WatchGas SST4	Honeywell BW MicroClip	Honeywell BW Flex	Blackline Safety G7	MSA Altair 4XR	ISC Ventis MX4	Dräger X-AM 2800	GasClip Technologies	Crowcon T4x	RKI GX-3R

See competitive Excel

Competitive Battlecard

MSA IO4 screen is 70% smaller than SST4
 RKI GX-3R screen is 132% smaller than the SST4

										
	Watch Gas Micro	Blackline G7	MSA Altair 4X	Draeger Xam 5000	BW Microclip XI	BW Flex	ISC Ventilis	Crowcon T4	GCT MGC Simple	BW Clip 4
Unit Width cm/inch	6.2 / 2.4	6.6 / 2.6	7.6 / 3.0	4.8 / 1.9	6 / 2.4	6.2 / 2.4	5.8 / 2.3	8 / 3.1	7 / 2.8	6.8 / 2.7
Unit Height cm/inch	10.3 / 4.1	15 / 5.9	11.2 / 4.4	13 / 5.1	11.3 / 4.4	10.8 / 4.3	10.3 / 4.1	13.5 / 5.3	12.1 / 4.8	12 / 4.7
Device face size cm ² / inch ²	64 / 25.14	99 / 38.98	85 / 33.51	62 / 24.57	68 / 26.69	67 / 26.36	60 / 23.52	108 / 42.52	85 / 33.36	82 / 32.13
Screen width cm/inch	4.3 / 1.69	2.6 / 1.02	3.7 / 1.46	2.7 / 1.06	3.9 / 1.54	3.1 / 1.22	3.8 / 1.5	3.5 / 1.4	3.9 / 1.54	3.9 / 1.54
Screen height cm/inch	3.6 / 1.42	2.2 / 0.87	3.7 / 1.46	4.1 / 1.61	2.8 / 1.1	1.8 / 0.63	2.6 / 1.02	3 / 1.18	3.5 / 1.38	2.6 / 1.02
Screen Ratio cm/inch	15.48 / 6.1	5.72 / 2.3	13.69 / 5.4	11.07 / 4.4	10.92 / 4.3	4.96 / 2	9.88 / 3.9	10.5 / 4.1	13.65 / 5.4	10.14 / 4
Unit Front Face V's Screen Coverage	24.24%	6.78%	16.08%	17.74%	16.11%	7.41%	16.54%	9.72%	16.12%	12.43%
Weight gr / oz	173 / 6.1	192 / 6.77	224 / 7.9	245 / 8.64	190 / 6.7	189 / 6.67	182 / 6.42	282 / 9.95	220 / 7.76	233 / 8.22



Competitive Battlecard

Diffusion

Competitive Battlecard

Honeywell



Honeywell BW MicroClip

Pro

- Extremely high brand awareness
- Best selling 4 gas globally
- Works with multi unit Intellidox Docking station

Con

- Periodic challenges with product supply due to single source sensor
- Limited durability
- Medium size display
- Slower response to gas than solid polymer sensor
- Higher test gas usage
- Longer gas test times
- Limited temperature range
- No display protection

Honeywell



Honeywell BW Flex

Pro

- Long run times
- High brand awareness
- Works with multi unit Intellidox Docking station
- Intelligent sensors for diagnostics and sensor health

Con

- Periodic challenges with product supply
- Limited durability
- Extra small display
- Slower response to gas than solid polymer sensor
- Higher test gas usage
- Longer gas test times

Competitive Battlecard

Honeywell



BW Clip 4

Pro

- 2 year continuous runtime
- No maintenance on battery or sensor similar to disposable single gas
- High brand awareness
- Works with multi unit Intellidox Docking station

Con

- Periodic challenges with product supply due to single source sensor
- Limited durability
- Extra small display
- Slower response to gas than solid polymer sensor
- Higher test gas usage
- Longer gas test times
- Small display
- Larger size
- Electrochemical sensors can leak electrolyte

blacklinesafety



G7

Pro

- Built-in cellular (and optional satellite) connectivity for live monitoring.
- Sends real-time alerts to safety teams via the Blackline Live cloud platform.
- Includes automated no-motion and fall detection.
- MPS sensor 1:1 measurement 15 hydrocarbons without correction factors
- Precalibrated sensor with ability to quickly change sensor head for new sensor specific mission

Con

- 3-4 times the price compared to watchgas
- Very large device
- Extremely small display that is scratch prone
- -20C to +55C primary operation
- Potentially leaking electrolyte sensors
- 20 hour runtime
- MPS sensor limited hydrocarbon measurement

Competitive Battlecard



Pro

- High brand awareness
- Built-in cellular connectivity for live monitoring.
- Sends real-time alerts to safety teams via the MSA Grid cloud platform.
- Extremely rugged device
- 25ft. (7.5 m) drop protection MIL-STD-810G drop protection Certified IP68 rating
- Always under warranty with subscription.
- Extremely fast sensor response 2x faster than industry average
- Screen protectors
- Health check on sensor

Con

- Twice the size of the SST4 series
- 3 times the cost on a subscription plan
- Small sized display
- Sensors can leak electrolyte
- 16 hour run-time
- No internal pump options.
- External wand style pump with separate battery life and separate functionality
- -20°C to +50°C operation



Pro

- High brand awareness
- Extremely rugged device
- 25 ft. (7.5 m) drop protection MIL-STD-810G drop protection Certified IP68 rating
- -40°C to +60°C operation
- Compliance flash
- 4 year instrument and sensor warranty
- Extremely fast sensor response 2 x faster than industry average
- Screen protectors
- Health check on sensor

Con

- Heavy, double the Micro and Mini weight
- Medium sized display
- Sensors can leak electrolyte
- Data upload and download slow via IR only through Galaxy dock and IR interface
- Rechargeable Li-polymer battery
- 24-hour run-time (1/2 to 1/8 runtime of WatchGas)
- <4 hour charge time compared to 2 or 3 for WatchGas
- No internal pump options.
- External wand style pump with separate battery life and separate functionality

Competitive Battlecard

INDUSTRIAL SCIENTIFIC

ISC Ventis MX4



Pro

- High brand awareness
- Works with multi unit DSX Docking station
- 4 year warranty on sensors and unit
- Wide offering of sensors

Con

- Higher test gas use
- Recommend monthly calibration
- Slower response to gas
- Extremely high test gas usage
- Extremely long gas test times
- Small display
- Low run times
- -20C to +50C operating temperature
- Sensors can leak electrolyte

Dräger

Draeger X-AM 2800



Pro

- High brand awareness
- Data is uploaded via Bluetooth

Con

- Small display
- Challenging configuration on device with two buttons
- Larger sized unit
- 12 hour runtime
- Separate docking station modules for each type of draeger unit

Competitive Battlecard



Multi Gas Clip Simple & Simple Plus



Pro

- Price
- 2 and 3 year runtimes

Con

- Minimal docking station and software value
- Larger size and heavier
- Small LCD
- Questionable policies ie calibration cycle



Multi Gas Clip



Pro

- Price
- Long runtimes

Con

- Minimal docking station and software value
- Larger size and heavier
- Small LCD
- Questionable policies ie 1 year calibration cycle

Competitive Battlecard



T4x



RKI GX-3R



Pro

- MPS sensor 1:1 measurement 15 hydrocarbons without correction factors
- Long life O2 sensor 5 year warranty
- MPS sensor 5 year warranty

Con

- No app for remote compliance upload
- Slow IR data transfer via cable or docking station
- -20C to +55C primary operation
- Potentially leaking electrolyte sensors
- 35 hour runtime
- Small LCD – scratch prone
- Light duty Plastic housing
- MPS sensor limited hydrocarbon measurement

Pro

- Small Size
- Small weight
- 100 dB alarm
- IP 66/68

Con

- No app for remote compliance upload
- Slow IR data transfer via cable or docking station
- -20C to +50C primary operation
- Potentially leaking electrolyte sensors
- 25 hour runtime
- Two button operation
- Ultra small LCD – scratch prone
- No NDIR options
- Light duty plastic housing

Competitor Challenge Handling Diffusion

Competitive Challenge Handling

Gas Clip Technologies Multi Gas Clip

Claim	Comment
Portable multi-gas detector with 2 month battery life (672 hours)	SST4 Micro: LEL Low Power Catalytic – 48hr
	SST4 Mini: LEL Catalytic Bead Sensor – 13hr
	SST4 Mini: LEL NDIR – 200hr
1-year calibration cycle* saves test gas & valuable time	The NDIR sensor is more stable than electrochemical and can be expected to last until 1 year between calibration cycles however the electrochemical sensors in the Multigas clip could see drifting that could cause false alarms or underreporting of alarm levels.
Simple one-button operation & large, easy-to-read screen	The WatchGas SST4 line of products has a display that is 13% larger making evacuation decisions quicker and the WatchGas line a safer device.
	The multi-gas clip is susceptible to the LCD being scratched where as the SST4 series has Screen Bumpers which protects the screen.
Lightweight & durable - alligator clip clamps on tight	The SST4 Micro and Mini are approximately 33% smaller and the multi-gas clip is 30% heavier than the SST4 Series .
	The Watchgas SST4 Micro and Mini has a IP rating of IP65/68
	The multi-gas clip has IP67
	IP65: Protected against dust (6 = dust-tight) and low-pressure water jets from any direction (5).
	IP68: Protected against dust and continuous immersion in water beyond 1 meter (depth/time defined by manufacturer).



Competitive Challenge Handling

Gas Clip Technologies Multi Gas Clip

Claim	Comment
<p>Sensor robustness</p> <p>-20° to +50°C</p>	<p>At cold temperatures (below freezing) liquid electrolyte used in standard electrochemical sensors will start to freeze and response times will take longer and in some cases the sensor will suffer irreputable damage. Response times get very slow around -20C and lower.</p>
	<p>In high heat situations (+40 C– 60 C) Can accelerate electrolyte evaporation in electrochemical sensors, giving incorrect readings and or reducing lifespan and making it more sensitive to interfering gases.</p>
	<p>The EC Sense solid polymer sensor technology in the SST4 Series remain stable at cold and hot temperatures (-40C - +60 C) and does not freeze or loose electrolyte in high temperatures.</p>
	<p>Solid polymer sensor technology does not leak electrolyte damaging the PCB and causing the gas detector to prematurely fail where as with liquid electrolyte this can occur.</p>



Competitive Challenge Handling

Gas Clip Technologies Multi Gas Clip Simple & Simple Plus

Claim	Comment
Portable multi-gas detector with 2 & 3 year runtime	SST4 Micro: LEL Low Power Catalytic – 48hr
	SST4 Mini: LEL Catalytic Bead Sensor – 13hr
	SST4 Mini: LEL NDIR – 200hr
1-year calibration cycle* saves test gas & valuable time	The NDIR sensor is more stable than electrochemical and can be expected to last until 1 year between calibration cycles however the electrochemical sensors in the Multigas clip could see drifting that could cause false alarms or underreporting of alarm levels.
Simple one-button operation & large, easy-to-read screen	The WatchGas SST4 line of products has a display that is 13% larger making evacuation decisions quicker and the WatchGas line a safer device.
	The multi-gas clip simple and simple plus is susceptible to the LCD being scratched where as the SST4 series has Screen Bumpers which protects the screen.
Lightweight & durable - alligator clip clamps on tight	The SST4 Micro and Mini are approximately 33% smaller and the multi-gas clip simple and simple plus are 30% heavier than the SST4 Series.
	The Watchgas SST 4 Micro and Mini has a IP rating of IP65/68.
	The multi-gas clip simple and simple plus has IP67.
	IP65: Protected against dust (6 = dust-tight) and low-pressure water jets from any direction (5).
	IP68: Protected against dust and continuous immersion in water beyond 1 meter (depth/time defined by manufacturer).



Competitive Challenge Handling

Gas Clip Technologies Multi Gas Clip Simple & Simple Plus

Claim	Comment
<p>Sensor robustness</p> <p>-20° to +50°C</p>	<p>At cold temperatures (below freezing) liquid electrolyte used in standard electrochemical sensors will start to freeze and response times will take longer and in some cases the sensor will suffer irreputable damage. Response times get very slow around -20C and lower.</p>
	<p>In high heat situations (+40 C– 60 C) Can accelerate electrolyte evaporation in electrochemical sensors, giving incorrect readings and or reducing lifespan and making it more sensitive to interfering gases.</p>
	<p>The EC Sense solid polymer sensor technology in the SST4 Series remain stable at cold and hot temperatures (-40C - +60 C) and does not freeze or loose electrolyte in high temperatures.</p>
	<p>Solid polymer sensor technology does not leak electrolyte damaging the PCB and causing the gas detector to prematurely fail where as with liquid electrolyte this can occur.</p>



Competitive Challenge Handling

MSA Altair 4XR

Claim	Comment
MSA Altair 4XR with easy to read display allows customers to evacuate quickly	The WatchGas SST4 line of products has a display that is 13% larger making evacuation decisions quicker and the WatchGas line a safer device.
	The SST 4 Micro and Mini have IP65/68.
High reliability with the IP68 rating and an extremely rugged device with 25 ft. (7.5 m) drop protection MIL-STD-810G. 25 drops from 4 feet	IP65: Protected against dust (6 = dust-tight) and low-pressure water jets from any direction (5). IP68: Protected against dust and continuous immersion in water beyond 1 meter (depth/time defined by manufacturer).
	This product is heavier in comparison at 24% more weight of the SST4 series.
Extremely rugged device Certified IP68 rating	Service centers indicate over a product life span all Lead oxygen sensor will trace the board, most can be cleaned but estimated 10% of all boards will be damaged over the life of a product span of 5 years. This result in unexpected business interruptions and unhappy customers.



Competitive Challenge Handling

MSA Altair 4XR

Claim	Comment
-40°C to +60°C operation	The MSA Altair uses proprietary Electrochemical sensors designed and manufactured by MSA. At cold temperatures (below freezing) liquid electrolyte will start to freeze and response times will take longer and in some cases the sensor will suffer irreputable damage. The MSA XXS sensor technology is designed for wider temperature extremes but slower response times are still expected.
	In high heat situations (40 – 60 C) Can accelerate electrolyte evaporation in electrochemical sensors, giving incorrect readings and or reducing lifespan, making it more sensitive to interfering gases.
	The EC Sense solid polymer sensor technology remains stable at cold and hot temperatures and does not freeze or loose electrolyte in high temperatures.
4 year instrument and sensor warranty	The MSA Altair 4XR comes with a 4-year warranty on both the device and its standard sensors, including those for O ₂ , LEL, CO, and H ₂ S - with the exception of the EX-H (Heavy Hydrocarbon) sensor, which has a 1-year warranty.
Extremely fast sensor response 2 x faster than industry average	SST4 response times are similar with LEL sensors being faster and toxic sensors being a little slower. With the solid polymer sensor technology there is no electrolyte to leak out and damage the PCB and cause the detector to prematurely fail which is common in electrolyte sensors like which is used in the Altair 4XR.



Competitive Challenge Handling

Honeywell GasAlertMicroClip

Claim	Comment
Guaranteed runtime for at least a 12-hour shift — down to -20°C — without compromising LEL detection of hydrogen, acetylene and other combustible gases	<p>The SST4 Micro offers a runtime of 48 hours—approximately 32 hours at -20°C— compared to the GasAlertMicroclip's 18 hours (or 12 hours at -20°C). As the battery typically loses 10% rechargeability each year after 2 years the Microclip will only run less than 10 hours at -20C where the SST4 Micro will still run for 26 hours.</p> <p>The two LEL sensors are of similar levels of hydrocarbon detection.</p>
Durable, rechargeable lithium polymer battery — tested to last in extreme environments	<p>At cold temperatures (below freezing) liquid electrolyte used in Microclip sensors will start to freeze and response times will take longer and in some cases the sensor will suffer irreparable damage.</p> <p>In high heat situations (40 – 60 C) Can accelerate electrolyte evaporation in electrochemical sensors, giving incorrect readings and or reducing lifespan and making it more sensitive to interfering gases.</p> <p>The EC Sense solid polymer sensor technology in the SST4 Micro and Mini remain stable at cold and hot temperatures (-40C - +60 C) and does not freeze or lose electrolyte in high temperatures.</p> <p>The GasAlert Microclip uses plug in style charging ports which can become damaged over time and cause charging issues. With the SST4 Micro And Mini with wireless charging downtime is minimized.</p>
<p>Ergonomic and wearable - doesn't weigh you down</p> <ul style="list-style-type: none"> • Real-time gas concentrations shown on LCD • Bright, wide-angle visual alarm bars 	<p>The LCD on the SST4 line is approximately 42 % larger expediting evacuations more safely. The SST4 line comes equipped with.</p>



Competitive Challenge Handling

Honeywell GasAlertMicroClip

Claim	Comment
<p>IP68 rating ensures maximum protection against dust and water — up to 45 minutes at a depth of 1.2m • User-friendly, tamperproof operation with just one button and intuitive LCD icons • IntelliFlash™ light indicating detector has been bump tested and is monitoring correctly</p>	<p>The Watchgas SST 4 Micro and Mini has a IP rating of IP65/68.</p>
	<p>IP65: Protected against dust (6 = dust-tight) and low-pressure water jets from any direction (5).</p>
	<p>IP68: Protected against dust and continuous immersion in water beyond 1 meter (depth/time defined by manufacturer).</p>
<p>Self-test of sensors, battery status, circuit integrity and audible/ visual alarms on startup Compatible with IntelliDoX docking station for automated bump tests and calibration Multi-language support in English, French, German, Spanish and Portuguese</p>	<p>The WatchGas also has intuitive LCD icons and one button operation. It is equipped with a Similar compliance flash.</p>
	<p>Gas detection Sensor health, detector and docking station battery levels, test gas bottle levels and product lifetime are proactively measured and monitored so maintenance teams can predictably order replacement parts and schedule when maintenance occurs. Parts can be ordered preemptively, reducing the high costs when items are ordered at the last moment.</p>
	<p>The SST Dock is universal so the one module can test all of the single gas and multi-gas WatchGas detectors keeping costs down vs the intellidox where you need to purchase separate bays.</p>
<p>Device Management with Honeywell SafetySuite</p>	<p>Safety suite only works in plant application or where the intellidox is located.</p>
	<p>For the SST4 with SST Dock, Kiosk and mobile app whether the worker is in a plant site or a remote application like a well site operator using a app (that never comes to a office) all the compliance information can easily be uploaded into the cloud.</p>
<p>Compatible with Honeywell BW™ Connect for real time monitoring</p>	<p>The real time monitoring is cost prohibitive as for hazardous locations an Intrinsically Safe phone costing \$1500 is required.</p>



Competitive Challenge Handling

Draeger X-AM 2800

Claim	Comment
<p>The X-am 2800 is small and lightweight, comfortable to wear, and easy-to-use, with large buttons for ease of use while wearing gloves. The display clearly shows important information, such as gas readings, alarms and time. The green D-light indicates that the unit is ready for use, with a simple interface. For added safety, the oxygen channel has four alarm thresholds, real pre-alarms, and main alarms for falling and rising concentrations. The X-am 2800 is approved for use in Ex zone 0, and has been tested according to protection class IP 68.</p>	<p>The watchgas SST4 line of products has a display that is 40% larger making evacuation decisions quicker and the watchgas line a safer device.</p> <p>The X-AM 2800 is susceptible to the LCD being scratched where as the SST4 series has Screen Bumpers which protects the screen.</p> <p>The SST4 Micro and Mini are approximately 55% smaller and the X-AM 2800 is 36% heavier than the SST4 Series.</p> <p>The WatchGas SST 4 Micro and Mini has a IP rating of IP65/68.</p> <p>IP65: Protected against dust (6 = dust-tight) and low-pressure water jets from any direction (5).</p> <p>IP68: Protected against dust and continuous immersion in water beyond 1 meter (depth/time defined by manufacturer).</p>
<p>Sensors: durable and powerful The newly-developed CatEx SR sensor calibrates within seconds and protects against shocks, measuring flammable vapors, such as gasoline, diesel, and nonane. The unit can also be set to measure methane, propane, hydrogen, and many other gases. The performance is complemented by Dräger's simple cross calibration concept, in which the measurement gas, calibration gas, and bump test gas can be specified individually. The X-am 2800 calculates the necessary conversions after testing, and the sensor meets the new IEC standard 60079-29-1 (International Electrotechnical Commission) standards. With decades of experience in sensor technology, Dräger develops and produces the sensors itself, including the powerful and durable electrochemical sensors in the XXS format, resulting in lower operating costs.</p>	<p>At cold temperatures (below freezing) liquid electrolyte used in standard electrochemical sensors will start to freeze and response times will take longer and in some cases the sensor will suffer irreputable damage. Response times get very slow around -20C and lower.</p> <p>In high heat situations (+40 C– 60 C) Can accelerate electrolyte evaporation in electrochemical sensors, giving incorrect readings and or reducing lifespan and making it more sensitive to interfering gases.</p> <p>The EC Sense solid polymer sensor technology in the SST4 Series remain stable at cold and hot temperatures (-40C - +60 C) and does not freeze or loose electrolyte in high temperatures.</p> <p>Solid polymer sensor technology does not leak electrolyte damaging the PCB and causing the gas detector to prematurely fail where as with liquid electrolyte this can occur.</p>



Competitive Challenge Handling

Draeger X-AM 2800

Claim	Comment
	SST4 Micro: LEL Low Power Catalytic – 48hr
<p>Focus on sustainability During the development of the X-am 2800, sustainability was priority. The durable Dräger sensors and the rechargeable power supply, which can be easily replaced with one screw, ensure a long service life.</p> <p>The product runtime with BLE is 12 hours.</p>	SST4 Mini: LEL Catalytic Bead Sensor – 13hr
	SST4 Mini: LEL NDIR – 200hr



Competitive Challenge Handling

Blackline Safety G7

Claim	Comment
All inclusive detector with automated compliance information and real time monitoring centre options	This can come at a large cost with average per unit costs being 3 = 4 times more expensive than the SST4 series gas detector. Compliance can be automated through NFC tap technology and the RTR software simplifies budgeting with product component replacement with low test gas notifications at 1/3 to 1/4 the price.
Rugged ergonomic design IP 67, multibuttoned operation, large display	The G7 is an extremely large portable gas detector making it challenging to wear comfortably in the breathing zone (30 cm from the face). The unit is approximately 62% larger than the SST4 series. The LCD size is one of the smallest in the 4 gas PGD market being 170% smaller than the SST4 series. The SST4 series with 1 button operation is more simple to use. The G7 has an IP rating of IP67 where as the SST 4 series has an IP65/68 rating making it more resistant to dust and dirt entry and increasing the product reliability.
Supports up to 5 gases with hot-swappable sensor cartridges.	At cold temperatures (below freezing) liquid electrolyte used in standard electrochemical sensors will start to freeze and response times will take longer and in some cases the sensor will suffer irreputable damage. Response times get very slow around -20C and lower.
-20°C to +55°C operation	In high heat situations (+40 C– 60 C) Can accelerate electrolyte evaporation in electrochemical sensors, giving incorrect readings and or reducing lifespan and making it more sensitive to interfering gases.
	The EC Sense solid polymer sensor technology in the SST4 Series remain stable at cold and hot temperatures (-40C - +60 C) and does not freeze or loose electrolyte in high temperatures.
	Solid polymer sensor technology does not leak electrolyte damaging the PCB and causing the gas detector to prematurely fail where as with liquid electrolyte this can occur.



Competitive Challenge Handling

Blackline Safety G7

Claim	Comment
MPS™ (combustible)	The MPS sensor is only specifically targeting these Methane (CH ₄) Propane (C ₃ H ₈), Butane (C ₄ H ₁₀), Pentane (C ₅ H ₁₂), Hydrogen (H ₂), Ethylene (C ₂ H ₄), Acetylene (C ₂ H ₂), Ethanol (C ₂ H ₅ OH), Methanol (CH ₃ OH), Isopropanol (C ₃ H ₈ O), Toluene (C ₇ H ₈), Xylene (C ₈ H ₁₀), Cyclohexane (C ₆ H ₁₂), Hexane (C ₆ H ₁₄), Heptane (C ₇ H ₁₆). if another hydrocarbon gas is detected it can be over or under the expected reading.
	The other 3 sensors still require calibration so this is a minimal value.
	While MPS sensors include built-in environmental compensation, extreme or rapidly changing conditions (e.g., sudden humidity or temperature shifts) can still affect readings temporarily.
	High Concentrations of CO ₂ can affect the MPS sensor readings.
	For the SST4 Series in applications where the hydrocarbon is known it is preferred to calibrate to the target gas species or set the correction factor to detect to confirm proper readings.
Flexible Deployment Out-of-the-box ready with minimal setup. Quick worker assignment and configuration. Compatible with G7 Dock for bump testing and calibration.	There is a considerable amount of time required to deploy a fleet of gas detectors and many internal staff to make this happen taking dozens to hundreds of hours depending on the size of the fleet.
Battery life 18 – 20 hours	SST4 Micro: LEL Low Power Catalytic – 48hr
	SST4 Mini: LEL Catalytic Bead Sensor – 13hr
	SST4 Mini: LEL NDIR – 200hr



Competitive Challenge Handling

Blackline Safety G7

Claim	Comment
<p>Built-in cellular (and optional satellite) connectivity for live monitoring.</p>	<p>Cellular works well in open space environments. When used in plants like refineries communication can become challenging.</p>



Competitive Challenge Handling

Crowcon T4x

Claim	Comment
Easy compliance upload of information and download	The T4X uses IRDA communication through a device link cable or a docking station to upload compliance information. Infrared transfer is extremely slow and can take 5-10 Min to upload or download information depending on the size of the file. The watchgas SST4 series can upload or download information in seconds with NFC tap technology via the SST Dock or Kiosk. In remote applications the SST4 Series can upload information via an App on a smart device like a cell phone.
Ergonomic Design rugged design	The unit has been Drop tested 4m onto concrete however the unit is 114% larger and 53% heavier than the SST4 series of gas detectors so can be challenging to wear in the breathing zone .
MPS™ Sensor Technology: Detects over 15 flammable gases with a single sensor and is poison-resistant. No field calibration required.	The MPS sensor is only specifically targeting these Methane (CH ₄) Propane (C ₃ H ₈), Butane (C ₄ H ₁₀), Pentane (C ₅ H ₁₂), Hydrogen (H ₂), Ethylene (C ₂ H ₄), Acetylene (C ₂ H ₂), Ethanol (C ₂ H ₅ OH), Methanol (CH ₃ OH), Isopropanol (C ₃ H ₈ O), Toluene (C ₇ H ₈), Xylene (C ₈ H ₁₀), Cyclohexane (C ₆ H ₁₂), Hexane (C ₆ H ₁₄), Heptane (C ₇ H ₁₆). If another hydrocarbon gas is detected it can be over or under the expected reading.
	The other 3 sensors still require calibration so this is a minimal value.
	While MPS sensors include built-in environmental compensation, extreme or rapidly changing conditions (e.g., sudden humidity or temperature shifts) can still affect readings temporarily.
	High Concentrations of CO ₂ can affect the MPS sensor readings.
	For the SST4 Series in applications where the hydrocarbon is known it is preferred to calibrate to the target gas species or set the correction factor to detect to confirm proper readings.



Competitive Challenge Handling

Crowcon T4x

Claim	Comment
Long-Life Oxygen Sensor: Up to 5 years lifespan, reducing maintenance and environmental waste	At cold temperatures (below freezing) liquid electrolyte used in standard electrochemical sensors will start to freeze and response times will take longer and in some cases the sensor will suffer irreparable damage. Response times get very slow around -20C and lower.
	In high heat situations (+40 C– 60 C) Can accelerate electrolyte evaporation in electrochemical sensors, giving incorrect readings and or reducing lifespan and making it more sensitive to interfering gases.
	The EC Sense solid polymer sensor technology in the SST4 Series remain stable at cold and hot temperatures (-40C - +60 C) and does not freeze or lose electrolyte in high temperatures.
Wide operating temperature range -20°C to +55°C	Solid polymer sensor technology does not leak electrolyte damaging the PCB and causing the gas detector to prematurely fail where as with liquid electrolyte this can occur.
Battery Life: Up to 35+ hours runtime (with MPS and LLO2 sensors).	SST4 Micro: LEL Low Power Catalytic – 48hr
	SST4 Mini: LEL Catalytic Bead Sensor – 13hr
	SST4 Mini: LEL NDIR – 200hr
Ease of Use: Single-button operation, glove-friendly interface.	The WatchGas SST4 line of products has a display that is 48% larger making evacuation decisions quicker and the WatchGas line a safer device.
	The Crowcon unit LCD is more susceptible to scratching as there is no protection where as the SST4 Series has built in Screen Bumpers that protects the screen from scratching due to smaller sensor profile keeping it clear over the product life and making evacuations decision quicker.



Competitive Challenge Handling

RKI GX-3R

Claim	Comment
Easy compliance upload of information and download	The GX-3R uses IRDA technology through a device link or a docking station to upload compliance information. Infrared transfer is extremely slow and can take 5-10 Min to upload or download information depending on the size of the file. The watchgas SST4 series can upload or download information in seconds with NFC tap technology via the SST Dock and or Kiosk. In remote applications the SST4 Series can upload information via an App on a smart device.
Wide operating temperature with intermittent use at low temperatures	At cold temperatures (below freezing) liquid electrolyte used in standard electrochemical sensors will start to freeze and response times will take longer and in some cases the sensor will suffer irreputable damage. Response times get very slow around -20C and lower.
-20°C ~ +50°C [-4°F ~ +122°F], 10 to 90% RH, non-condensing (continuous environment) -40°C ~ +60°C [-40°F ~ +140°F], 0 to 95% RH, non-condensing (temporary environment, 15 minutes)	In high heat situations (+40 C– 60 C) Can accelerate electrolyte evaporation in electrochemical sensors, giving incorrect readings and or reducing lifespan and making it more sensitive to interfering gases.
	The EC Sense solid polymer sensor technology in the SST4 Series remain stable at cold and hot temperatures (-40C - +60 C) and does not freeze or loose electrolyte in high temperatures.
	Solid polymer sensor technology does not leak electrolyte damaging the PCB and causing the gas detector to prematurely fail where as with liquid electrolyte this can occur.
	For the RKI GX-3R it's important to note that certain sensors, such as the H ₂ -compensated CO sensor, may not function optimally if exposed to temperatures above 40°C (104°F) for extended periods (e.g., more than 15 minutes).



Competitive Challenge Handling

RKI GX-3R

Claim	Comment
<p>Simple 2-button operation; clear LCD display with icons.</p> <p>world's smallest and lightest 4-gas monitor (3.52 oz), ideal for personal use in confined spaces.</p> <p>Compact, lightweight polycarbonate housing</p>	<p>The WatchGas SST4 line of products has a display that is 100% larger (2 x as large) making evacuation decisions quicker and the WatchGas line a safer device.</p>
	<p>The GX-3R LCD is more susceptible to scratching as there is no protection where as the SST4 Series has built in Screen Bumpers that protects the screen from scratching due to smaller sensor profile keeping it clear over the product life and making evacuations decision quicker.</p>
	<p>The Single button interface on the SST4 series makes it an easier to use solution vs the RKI unit.</p>
	<p>The RKI polycarbonate design of the GX-3R allows for a lighter unit (50% lighter) and a smaller unit however the plastic body is more susceptible to damage in industrial environments when compared to the SST4 series with polycarbonate interior and rubber overmould (double shot housing) giving it a more durable housing. The Rubber boot accessory can be added to the GX-3R but this adds weight and size and must be removed to be used in the docking station.</p>
	<p>Designed with the harshest environments in mind the SST4 offers an IP rating of 65- 68. The casing is a double shot housing that gives extra robustness while not compromising on quality. The screen . The screen protectors located either side of the display protect the LCD from scratching.</p>
<p>Flashes LEDs every 30 seconds if bump test, calibration, or alarm event is overdue.</p>	<p>Watchgas compliance indicator flashes periodically if the unit is out of compliance and the frequency is user adjustable.</p>
<p>Dual-filament LEL sensor resists silicone poisoning; long-life O₂ sensor (3–5 years).</p>	<p>The SST4 Mini with NDIR sensors cannot be poisoned with silicone.</p>
	<p>The SST4 Micro with LPC sensors are less susceptible to poisoning.</p>



Competitive Challenge Handling

RKI GX-3R

Claim	Comment
Up to 25 hours of operation on a single charge (Li-ion battery).	SST4 Micro: LEL Low Power Catalytic – 48hr
	SST4 Mini: LEL Catalytic Bead Sensor – 13hr
	SST4 Mini: LEL NDIR – 200hr
Audible (100 dB), visual, and vibration alerts for safety.	The WatchGas SST4 has multi-coloured LEDs that indicate alarm (Red), Non compliance (yellow) and in good working order (Green/Blue) . The compliance indicator can be set to lock the device out so workers must bump or calibrate prior to use.



Competitive Challenge Handling

ISC Ventis MX4

Claim	Comment
Simple 2-button operation; clear LCD display with icons. IP66 water resistance	The WatchGas SST4 line of products has a display that is 57% larger making evacuation decisions quicker and the WatchGas line a safer device.
	The ISC Ventris LCD is more susceptible to scratching as there is no protection where as the SST4 Series has built in Screen Bumpers that protects the screen from scratching due to smaller sensor profile keeping it clear over the product life and making evacuations decision quicker.
	The Single button interface on the SST4 series makes it an easier to use solution vs the ISC unit.
	Designed with the harshest environments in mind the SST4 offers an IP rating of 65- 68. The casing is a double shot housing that gives extra robustness while not compromising on quality.
Diffusion instruments compatible with 12-hour, 18-hour, or 20-hour batteries	SST4 Micro: LEL Low Power Catalytic – 48hr
	SST4 Mini: LEL Catalytic Bead Sensor – 13hr
	SST4 Mini: LEL NDIR – 200hr



Competitive Challenge Handling

ISC Ventis MX4

Claim	Comment
	<p>At cold temperatures (below freezing) liquid electrolyte used in standard electrochemical sensors will start to freeze and response times will take longer and in some cases the sensor will suffer irreputable damage. Response times get very slow around -20C and lower.</p>
<p>Wide operating temperature</p> <p>-20 °C to 50 °C (-4 °F to 122 °F) **</p> <p>** Operating temperatures above 50 °C (122 °F) may cause reduced instrument accuracy.</p>	<p>In high heat situations (+40 C– 60 C) Can accelerate electrolyte evaporation in electrochemical sensors, giving incorrect readings and or reducing lifespan and making it more sensitive to interfering gases.</p>
<p>Operating temperatures below -20 °C (-4 °F) may cause reduced instrument accuracy and affect display and alarm performance.</p>	<p>The EC Sense solid polymer sensor technology in the SST4 Series remain stable at cold and hot temperatures (-40C - +60 C) and does not freeze or loose electrolyte in high temperatures.</p>
	<p>Solid polymer sensor technology does not leak electrolyte damaging the PCB and causing the gas detector to prematurely fail where as with liquid electrolyte this can occur.</p>



Competitive Challenge Handling

Honeywell BW Flex

Claim	Comment
<p>Small, lightweight and wearable.</p> <p>One-button operation.</p>	<p>the BW Flex is 60% larger than the SST4 series of gas detectors so can be challenging to wear in the breathing zone.</p>
<p>Large LCD display with icons.</p>	<p>The WatchGas SST4 line of products has a display that is 212% larger making evacuation decisions quicker and the WatchGas line a safer device.</p>
<p>40 days @ 8 hours (320 hours) of use per day with IR LEL</p> <p>15 hours with Catalytic LEL (with NDIR CH4 sensor)</p>	<p>SST4 Micro: LEL Low Power Catalytic – 48hr</p>
	<p>SST4 Mini: LEL Catalytic Bead Sensor – 13hr</p>
	<p>SST4 Mini: LEL NDIR – 200hr</p>



Competitive Challenge Handling

Honeywell BW Flex

Claim	Comment
	<p>At cold temperatures (below freezing) liquid electrolyte used in standard electrochemical sensors will start to freeze and response times will take longer and in some cases the sensor will suffer irreputable damage. Response times get very slow around -20C and lower.</p>
<p>Wide operating temperature</p> <p>-40°C to 60°C (-40°F to 140°F) and -20°C to 60°C (-4°F to 140°F) with Catalytic LEL sensor</p>	<p>In high heat situations (+40 C– 60 C) Can accelerate electrolyte evaporation in electrochemical sensors, giving incorrect readings and or reducing lifespan and making it more sensitive to interfering gases.</p>
	<p>The EC Sense solid polymer sensor technology in the SST4 Series remain stable at cold and hot temperatures (-40C - +60 C) and does not freeze or loose electrolyte in high temperatures.</p>
	<p>Solid polymer sensor technology does not leak electrolyte damaging the PCB and causing the gas detector to prematurely fail where as with liquid electrolyte this can occur.</p>



Competitive Challenge Handling

MSA IO4

Claim	Comment
Available through MSA+, our comprehensive subscription program including hardware and software, gives you access to powerful cloud-based solutions enabling faster implementation, increased warranty coverage and automatic software and firmware upgrades – with minimal capital expense Designed with fully integrated connectivity for real-time visibility across your worksites from Day One.	Compliance awareness through the RTR software can be achieved similarly with 1/3 the cost of the MSA IO4 solution.
CAT-M LTE cellular connectivity and integration with the MSA Grid	This results in a very low runtime at 16 hours at +20 Celsius. This will be much lower at -20c and -30C. In plant applications where there is a high level of infrastructure connectivity can be challenging.
Ergonomic product easily worn in the breathing zone	The IO4 is approximately 100 percent larger and is 14% heavier.
Large display for evacuation management	The WatchGas SST4 line of products has a display that is 60% larger making evacuation decisions quicker and the WatchGas line a safer device.
	Designed with the harshest environments in mind the SST4 offers an IP rating of 65- 68. The casing is a double shot housing that gives extra robustness while not compromising on quality.
16 hour runtime	SST4 Micro: LEL Low Power Catalytic – 48hr
	SST4 Mini: LEL Catalytic Bead Sensor – 13hr
	SST4 Mini: LEL NDIR – 200hr



Competitive Challenge Handling

MSA IO4

Claim	Comment
<p>Wide operating temperature</p> <p>-20°C to +50°C</p>	<p>As this product uses the Xcell sensor design its interesting that this product does not have the same lower level and higher level temp specifications to the Altair 4XR.</p>
	<p>At cold temperatures (below freezing) liquid electrolyte used in standard electrochemical sensors will start to freeze and response times will take longer and in some cases the sensor will suffer irreputable damage. Response times get very slow around -20C and lower.</p>
	<p>In high heat situations (+40 C– 60 C) Can accelerate electrolyte evaporation in electrochemical sensors, giving incorrect readings and or reducing lifespan and making it more sensitive to interfering gases.</p>
	<p>The EC Sense solid polymer sensor technology in the SST4 Series remain stable at cold and hot temperatures (-40C - +60 C) and does not freeze or loose electrolyte in high temperatures.</p>
	<p>Solid polymer sensor technology does not leak electrolyte damaging the PCB and causing the gas detector to prematurely fail where as with liquid electrolyte this can occur.</p>



Competitive Challenge Handling

Honeywell BW Clip 4

Claim	Comment
Ergonomic Design	The BW Clip 4 is 46% larger than the SST4 series of gas detectors so can be challenging to wear in the breathing zone. The Clip 4 is 27% heavier so can be challenging to wear for long shifts.
Simple one-button operation & large, easy-to-read screen	The WatchGas SST4 line of products has a display that is 52% larger making evacuation decisions quicker and the WatchGas line a safer device.
	The BW Clip 4 is susceptible to the LCD being scratched where as the SST4 series has Screen Bumpers which protects the screen.
Wide operating temperature <ul style="list-style-type: none"> -20°C to 55°C for CH4 and -40°C to +55°C for CO, O2, H2S. 	At cold temperatures (below freezing) liquid electrolyte used in standard electrochemical sensors will start to freeze and response times will take longer and in some cases the sensor will suffer irreputable damage. Response times get very slow around -20C and lower.
	In high heat situations (+40 C- 60 C) Can accelerate electrolyte evaporation in electrochemical sensors, giving incorrect readings and or reducing lifespan and making it more sensitive to interfering gases.
	The EC Sense solid polymer sensor technology in the SST4 Series remain stable at cold and hot temperatures (-40C - +60 C) and does not freeze or loose electrolyte in high temperatures.
	Solid polymer sensor technology does not leak electrolyte damaging the PCB and causing the gas detector to prematurely fail where as with liquid electrolyte this can occur.



	watchgas	Honeywell	MSA	Industrial Engineering	Dräger	gascip	MachSafety	crowcon	...
Ultra fast sensor response – Extra Large screen – automated muster check in via NFC – Display protection	Expedited Evacuation	●	◐	●	◐	◐	○	◐	○
Induction charging – long runtime – leakless sensors – reduced test time – fast quick charge	Minimized Business Interruption	●	◐	◐	◐	◐	◐	◐	◐
Reduced test Gas– total COO – sensor replacement costs	Cost Efficiency	●	◐	●	◐	◐	◐	◐	◐
Operates –40C to +60 C with no sensor response affects	Wide Operating Range	●	◐	◐	◐	◐	◐	◐	◐
NFC upload compliance info – testing reminders – visual group coaching	Automated Compliance	●	◐	●	◐	○	●	◐	◐
	Price	●	◐	◐	◐	●	○	○	◐

Competitive Comparison

Pumped

Competitive Comparison SST4 Pump



Feature	watchgas	Honeywell	RKI INSTRUMENTS	INDUSTRIAL SCIENTIFIC	Dräger	gasclip	blacklinesafety	crowcon
Fast sensor response-Extra Large screen-Display protection-Sample distance – kink less hose design	Efficient CSE	●	◐	◑	◑	◑	◑	◑
Induction charging – long runtime – leakless sensors - reduced test time – fast quick charge	Minimized Business Interruption	●	◐	◑	◑	◑	◑	◑
Reduced test Gas- total COO – sensor replacement costs	Cost Efficiency	●	◐	◑	◑	◑	◑	◑
Ability to monitor inert atmosphere	Inert Atmosphere Mode	●	○	○	○	○	○	○
NFC upload compliance info – testing - reminders – visual group coaching	Automated Compliance	●	◑	◑	◑	○	●	◑
	Price	●	◐	◑	◑	●	○	○

Competitive Specification Comparison – Pumped

								
Solution Value	WatchGas SST4	Honeywell BW™ Max XT II	ISC Ventis MX4 with pump	Draeger X-AM 3500	Crowcon Gas-Pro with pump	GasClip Technologies MGC Pump	RKI GX-Force	Blackline Safety G7 Pump
See attached competitive Excel								

Competitive Battlecard Pumped



Competitive Battlecard

Honeywell



Honeywell BW™ Max XT II

Pro

- Large screen
- Extremely high brand awareness
- Best selling 4 gas pumped globally
- Works with multi unit Intellidox Docking station

Con

- Periodic challenges with product supply due to single source sensor
- Limited durability
- 1.5 x larger than SST4 Pump & 19% heavier
- Short sampling distance
- Low runtime
- Slower response to gas than solid polymer sensor
- Higher test gas usage
- Longer gas test times
- No display protection
- Sensors can leak electrolyte



MGC Pump

Pro

- Price
- Long runtimes



Con

- Minimal docking station and software value
- Larger size and heavier
- Questionable policies ie 1 year calibration cycle
- Short sampling distance
- Minimal compliance awareness
- Sensors can leak electrolyte

Competitive Battlecard

INDUSTRIAL SCIENTIFIC

ISC Ventis MX4 with Pump



Pro

- High brand awareness
- Works with multi unit DSX Docking station
- 4 year warranty on sensors and unit
- Wide offering of sensors

Con

- Recommend monthly calibration
- Slower response to gas
- Extremely high test gas usage
- Extremely long gas test times
- Small display
- Low run times
- Sensors can leak electrolyte
- Attachable pump can lead to more failure
- Sensors can leak electrolyte

Dräger

Draeger X-AM 3500



Pro

- High brand awareness
- Data is uploaded via Bluetooth and an app via smart device
- Inductive charging
- Visual compliance indicators

Con

- Medium display
- Challenging configuration on device with two buttons
- Almost 200% larger than SST4 Pump
- Minimal runtime
- Separate docking station modules for each type of draeger unit
- Sensors can leak electrolyte

Competitive Battlecard



Gas-Pro



Pro

- Can be configured as 5 gas pumped

Con

- 1.5 x larger than SST4 Pump and 24% heavier
- No app for remote compliance upload
- Slow IR data transfer via cable for PC or docking station
- Potentially leaking electrolyte sensors
- Low runtime
- Small LCD – scratch prone
- Price



GX-Force

Pro

- 3 year warranty on product and sensor
- Low sensor replacement costs
- Lite weight



Con

- No app for remote compliance upload
- 1.75 x larger
- Slow IR data transfer via cable or docking station
- Potentially leaking electrolyte sensors
- Low runtime
- Two button operation
- Ultra small LCD – scratch prone

Competitive Battlecard

blacklinesafety



G7 Pumped

Pro

- Built-in cellular (and optional satellite) connectivity for live monitoring.
- Sends real-time alerts to safety teams via the Blackline Live cloud platform.
- Includes automated no-motion and fall detection.
- MPS sensor 1:1 measurement 15 hydrocarbons without correction factors
- Precalibrated sensor with ability to quickly change sensor head for new sensor specific mission

Con

- 3-4 times the price compared to watchgas
- Very large device
- Extremely small display that is scratch prone
- -20C to +55C primary operation
- Potentially leaking electrolyte sensors
- 20 hour runtime
- MPS sensor limited hydrocarbon measurement

Competitor Challenge Handling Pumped

Competitive Challenge Handling

Honeywell BW™ Max XT II

Claim	Comment
Long runtime	SST4 Pump LPC Low Power Catalytic: 50hr
13 hours @ 32°F / 0°C	SST4 Pump HP LEL: 18hr
8 hours @ -4°F / -20°C	SST4 Pump IR: 100hr
Recharges in 6 hours	
Lightweight & durable	<p>The BW Max XT II is 160% larger than the SST4 Pump and 19% heavier. This makes the SST4 a more ergonomic design and easier to hold over long shifts during confined space entries. Both are fashioned with polycarbonate and outer rubber covering.</p> <p>The SST4 Pump enhances worker safety with a bottom-mounted tubing connection that helps prevent kinks during confined space entry testing where as the connection on the Max XT is top mounted.</p>
Long Sampling distance at 23 metres	The SST4 pump can sample up to 33 metres.
Easy compliance awareness with the LED Inteliflash	Upload all compliance information within a few seconds into the cloud via app, kiosk or SST Dock with a simple tap via NFC technology.
Onscreen reminders for compliance	Compliance with On screen reminders of gas testing, Group coaching with highly visible Compliance indicator that can be seen from a distance and automated compliance reminder emails to operations managers.
	The Max XT does not have an easy way to upload compliance information in remote applications.
	There is no automated email for non compliant workers with Honeywell.
Quality sensors with IP66/67 enclosure	Reduced business interruption with gas sensors that do not leak electrolyte and damage PCBs, leak resistant enclosures (IP65/68) that shield electronics from environmental damage and externally replaceable filters for harsh environments.



Competitive Challenge Handling

ISC Ventis MX4 with Pump

Claim	Comment
Long runtime	SST4 Pump LPC Low Power Catalytic: 50hr
Rechargeable Extended-Range Lithium-ion Battery, (12 hours typical @ 20 °C) with Pump, Replaceable AAA Alkaline Battery, 4 hours typical @ 20 °C) with Pump	SST4 Pump HP LEL: 18hr
	SST4 Pump IR: 100hr
	The BW Max XT II is 256% larger than the SST4 Pump and 38% heavier. This makes the SST4 a more ergonomic design and easier to hold over long shifts during confined space entries. Both are fashioned with polycarbonate and outer rubber covering.
Lightweight & durable	The SST4 Pump enhances worker safety with a bottom-mounted tubing connection that helps prevent kinks during confined space entry testing where as the connection on the Max XT is top mounted.
Long Sampling distance at 30 metres	The SST4 pump can sample up to 33 metres.



Competitive Challenge Handling

ISC Ventis MX4 with Pump

Claim	Comment
Easy compliance awareness Onscreen reminders for compliance	Upload all compliance information within a few seconds into the cloud via app, kiosk or SST Dock with a simple tap via NFC technology.
	Compliance with On screen reminders of gas testing, Group coaching with highly visible Compliance indicator that can be seen from a distance and automated compliance reminder emails to operations managers.
	The MX4 does not have a LED dedicated to compliance awareness.
	Compliance information is brought in through the docking station with no remote way to upload information
Quality sensors with IP66/67 enclosure	There is no automated email for non compliant workers with Honeywell
Quality sensors with IP66/67 enclosure	Reduced business interruption with gas sensors that do not leak electrolyte and damage PCBs, leak resistant enclosures (IP65/68) that shield electronics from environmental damage and externally replaceable filters for harsh environments.
Eliminate the need for extra monitors and transition seamlessly from personal monitoring to confined space entry with the Ventis® Slide-on Pump	For Proper CSE an attendant should be continuously monitoring while the entrants are inside. For this reason a dedicated pumped instrument and diffusion instruments are preferred that are each specialized for their mission. Add on accessories like a pump are more prone to failure as it's a separate device.



Competitive Challenge Handling

Draeger X-AM 3500



Claim	Comment
Long runtime	SST4 Pump LPC Low Power Catalytic: 50hr
12-16 hours	SST4 Pump HP LEL: 18hr SST4 Pump IR: 100hr
Lightweight & durable	The X-AM 3500 is 195% larger than the SST4 Pump and 100% heavier. This makes the SST4 a more ergonomic design and easier to hold over long shifts during confined space entries. The SST4 Pump enhances worker safety with a bottom-mounted tubing connection that helps prevent kinks during confined space entry testing where as the connection on the X-AM 3500 is top mounted.
Inductive charging	The SST4 Pump also has inductive charging with longer run times between charging.
Easy compliance awareness	Upload all compliance information within a few seconds into the cloud via app, kiosk or SST Dock with a simple tap via NFC technology. Compliance with On screen reminders of gas testing, Group coaching with highly visible Compliance indicator that can be seen from a distance and automated compliance reminder emails to operations managers.
Onscreen reminders for compliance	For the X-AM 3500 there is a green D-light indicator that indicates the unit is tested. The X-AM 3500 can pull information through the X-Dock or via Bluetooth and a cell phone with dragger app. There is no automated email for non compliant workers with Draeger.
Quality sensors with IP68 enclosure	Reduced business interruption with gas sensors that do not leak electrolyte and damage PCBs, leak resistant enclosures (IP65/68) that shield electronics from environmental damage and externally replaceable filters for harsh environments.



Competitive Challenge Handling

Crowcon Gas-Pro with Pump

Claim	Comment
Long runtime 13 hours	SST4 Pump LPC Low Power Catalytic: 50hr SST4 Pump HP LEL: 18hr SST4 Pump IR: 100hr
Lightweight & durable	The Gas-Pro is 158% larger than the SST4 Pump and 24% heavier. This makes the SST4 a more ergonomic design and easier to hold over long shifts during confined space entries. Both are fashioned with polycarbonate and outer rubber covering. The SST4 Pump enhances worker safety with a bottom-mounted tubing connection that helps prevent kinks during confined space entry testing where as the connection on the Gas-Pro is mid unit mounted.
Sampling distance not listed	The SST4 pump can sample up to 33 metres.
Easy compliance awareness Onscreen reminders for compliance	Upload all compliance information within a few seconds into the cloud via app, kiosk or SST Dock with a simple tap via NFC technology. Compliance with On screen reminders of gas testing, Group coaching with highly visible Compliance indicator that can be seen from a distance and automated compliance reminder emails to operations managers The Gas-Pro uses a USB interface to PC to upload information so can be challenging in remote applications. Other upload options are via the docking station. There is no automated email for non compliant workers with Crowcon.
Quality sensors with IP67 enclosure	Reduced business interruption with gas sensors that do not leak electrolyte and damage PCBs, leak resistant enclosures (IP65/68) that shield electronics from environmental damage and externally replaceable filters for harsh environments.



Competitive Challenge Handling

GasClip Technologies MGC Pump

Claim	Comment
Long runtime	SST4 Pump LPC Low Power Catalytic: 50hr
52 hours	SST4 Pump HP LEL: 18hr
	SST4 Pump IR: 100hr
Lightweight & durable	<p>The MGC Pump is 146% larger than the SST4 Pump and 28% heavier. This makes the SST4 a more ergonomic design and easier to hold over long shifts during confined space entries.</p> <p>The SST4 Pump enhances worker safety with a bottom-mounted tubing connection that helps prevent kinks during confined space entry testing where as the connection on the MGC Pump is top mounted.</p>
Long Sampling distance at 23 metres	The SST4 pump can sample up to 33 metres



Competitive Challenge Handling

GasClip Technologies MGC Pump

Claim	Comment
	Upload all compliance information within a few seconds into the cloud via app, kiosk or SST Dock with a simple tap via NFC technology.
Easy compliance awareness	Compliance with On screen reminders of gas testing, Group coaching with highly visible Compliance indicator that can be seen from a distance and automated compliance reminder emails to operations managers.
Onscreen reminders for compliance	The MGC Pump does not have a LED dedicated to compliance awareness.
	The MGC Pump does not have an easy way to upload compliance information in remote applications.
	There is no automated email for non compliant workers with GasClip Technologies
Quality sensors with IP67 enclosure	Reduced business interruption with gas sensors that do not leak electrolyte and damage PCBs, leak resistant enclosures (IP65/68) that shield electronics from environmental damage and externally replaceable filters for harsh environments.
1-year calibration cycle* saves test gas & valuable time	The NDIR sensor is more stable than electrochemical and can be expected to last until 1 year between calibration cycles however the electrochemical sensors in the Multigas clip could see drifting that could cause false alarms or underreporting of alarm levels.



Competitive Challenge Handling

RKI GX-Force

Claim	Comment
Long runtime	SST4 Pump LPC Low Power Catalytic: 50hr
30 hours	SST4 Pump HP LEL: 18hr
	SST4 Pump IR: 100hr
Lightweight & durable	<p>The GX-Force is 175% larger than the SST4 Pump and 2% heavier. This makes the SST4 a more ergonomic design and easier to hold over long shifts during confined space entries. Both are fashioned with polycarbonate and outer rubber covering.</p> <p>The SST4 Pump enhances worker safety with a bottom-mounted tubing connection that helps prevent kinks during confined space entry testing where as the connection on the GX-Force is top mounted.</p>
Long Sampling distance at 30 metres	The SST4 pump can sample up to 33 metres
Easy compliance awareness	Upload all compliance information within a few seconds into the cloud via app, kiosk or SST Dock with a simple tap via NFC technology.
Onscreen reminders for compliance	<p>Compliance with On screen reminders of gas testing, Group coaching with highly visible Compliance indicator that can be seen from a distance and automated compliance reminder emails to operations managers.</p> <p>The GX-Force does not have a LED dedicated to compliance awareness.</p> <p>The GX-Force does not have an easy way to upload compliance information in remote applications. Only connection to a PC or docking station is how information is uploaded</p> <p>There is no automated email for non compliant workers with RKI</p>
Quality sensors with IP67 enclosure	Reduced business interruption with gas sensors that do not leak electrolyte and damage PCBs, leak resistant enclosures (IP65/68) that shield electronics from environmental damage and externally replaceable filters for harsh environments.
3 year warranty on product and sensors	Reduced business interruption with gas sensors that do not leak electrolyte and damage PCBs.



Competitive Challenge Handling

Blackline Safety G7 Pump

Claim	Comment
All inclusive detector with automated compliance information and real time monitoring centre options	This can come at a large cost with average per unit costs being 3 = 4 times more expensive than the SST4 series gas detector. Compliance can be automated through NFC tap technology and the RTR software simplifies budgeting with product component replacement with low test gas notifications at 1/3 to 1/4 the price.
Rugged ergonomic design IP 67, multi-buttoned operation, large display	The G7 pump is a large portable gas detector making it challenging to hold for long periods of time during confined space entry monitoring . The unit is approximately 77% larger than the SST4 series. The LCD size is one of the smallest in the 4 gas pumped PGD market being 170% smaller than the SST4 series. The SST4 series with 1 button operation is more simple to use. The G7 has an IP rating of IP67 where as the SST 4 series has an IP65/68 rating making it more resistant to dust and dirt entry and increasing the product reliability.
Battery life 14 hours	SST4 Pump LPC Low Power Catalytic: 50hr
	SST4 Pump HP LEL: 18hr
	SST4 Pump IR: 100hr
Flexible Deployment Out-of-the-box ready with minimal setup. Quick worker assignment and configuration. Compatible with G7 Dock for bump testing and calibration.	There is a considerable amount of time required to deploy a fleet of gas detectors and many internal staff to make this happen taking dozens to hundreds of hours depending on the size of the fleet.



Competitive Challenge Handling

Blackline Safety G7 Pump

Claim	Comment
MPS™ (combustible)	<p>The MPS sensor is only specifically targeting these Methane (CH₄) Propane (C₃H₈), Butane (C₄H₁₀), Pentane (C₅H₁₂), Hydrogen (H₂), Ethylene (C₂H₄), Acetylene (C₂H₂), Ethanol (C₂H₅OH), Methanol (CH₃OH), Isopropanol (C₃H₈O), Toluene (C₇H₈), Xylene (C₈H₁₀), Cyclohexane (C₆H₁₂), Hexane (C₆H₁₄), Heptane (C₇H₁₆). if another hydrocarbon gas is detected it can be over or under the expected reading.</p>
	<p>The other 3 sensors still require calibration so this is a minimal value.</p>
	<p>While MPS sensors include built-in environmental compensation, extreme or rapidly changing conditions (e.g., sudden humidity or temperature shifts) can still affect readings temporarily.</p>
	<p>High Concentrations of CO₂ can affect the MPS sensor readings.</p>
	<p>For the SST4 Series in applications where the hydrocarbon is known it is preferred to calibrate to the target gas species or set the correction factor to detect to confirm proper readings.</p>
<p>Built-in cellular (and optional satellite) connectivity for live monitoring.</p>	<p>Cellular works well in open space environments. When used in plants like refineries communication can become challenging.</p>

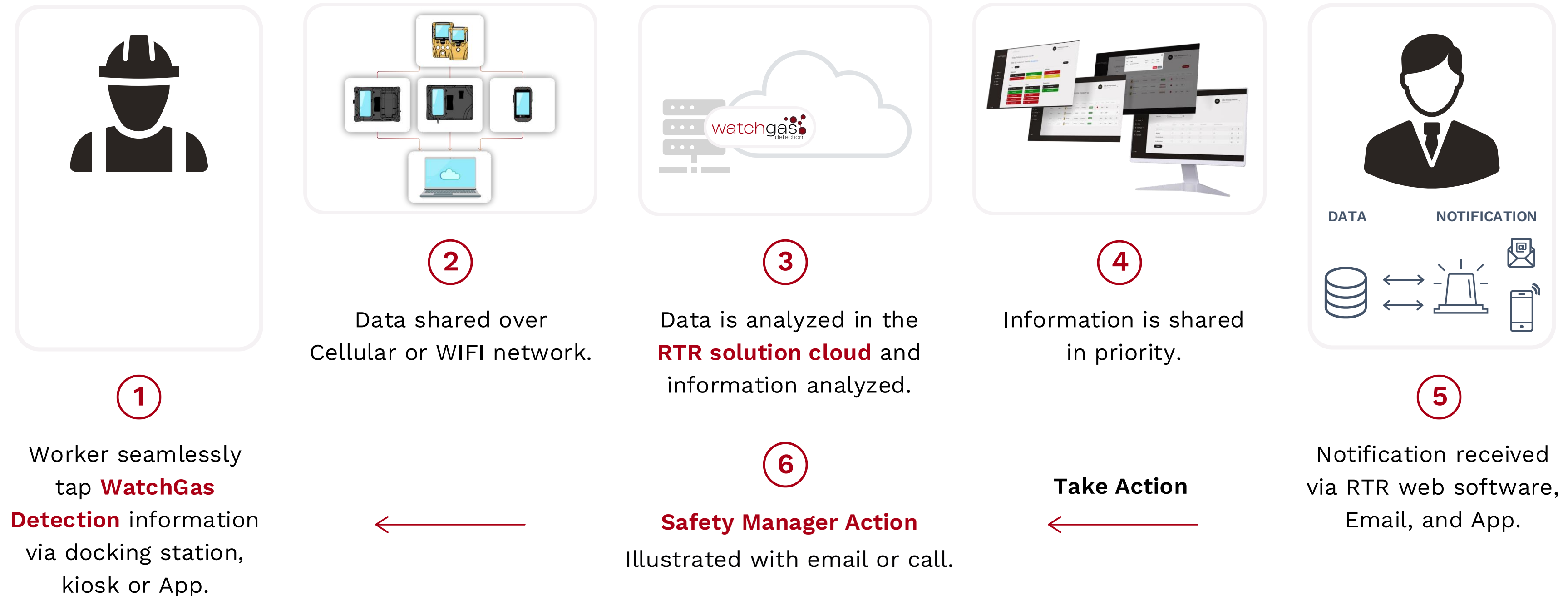




Technology

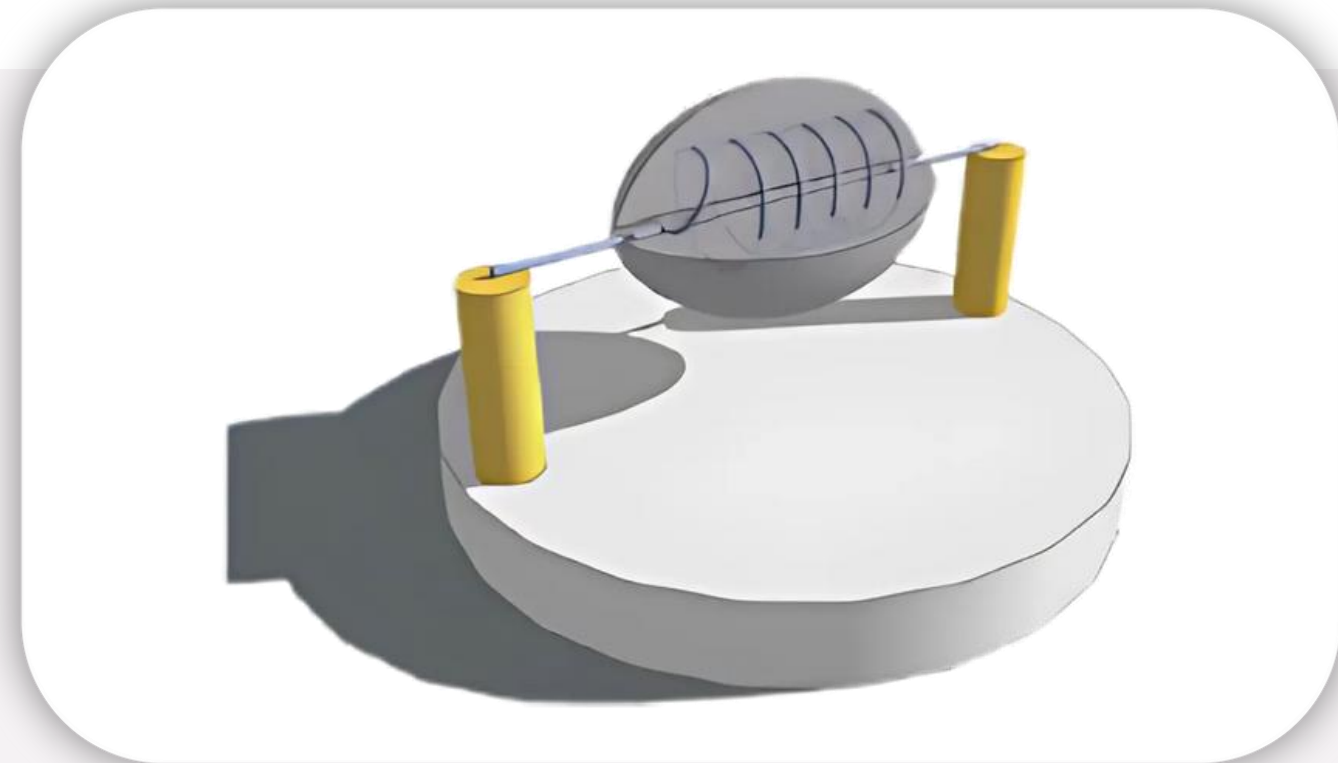
NFC as the Enabler

Near Field Communication technology is embedded in each WatchGas device and accessory as well as common cell phones. **Transferring:** Detector status Events Gas alarms.



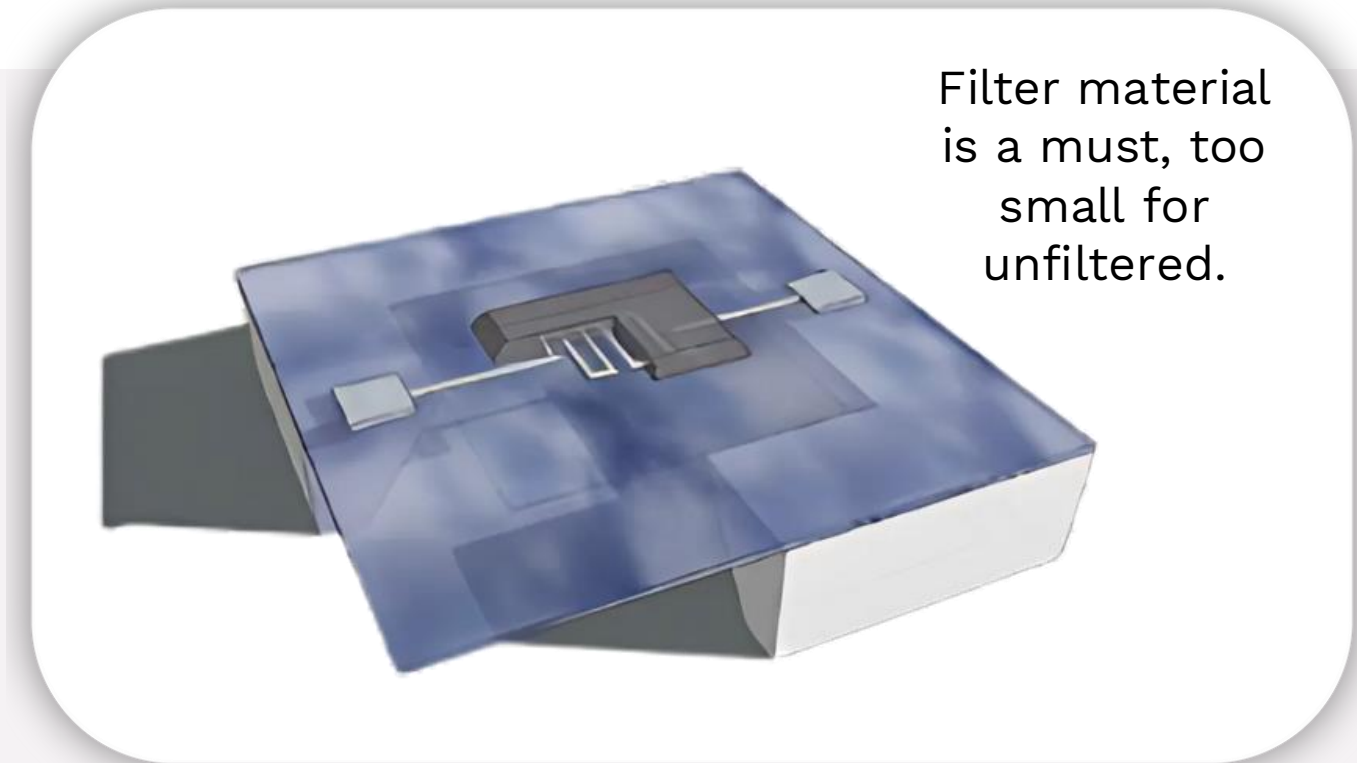
Competitive Battlecard

MEMS sensor can be heated fast so it can be on for 400 mSec. off for 600 mSec.



Traditional Catalytic bead



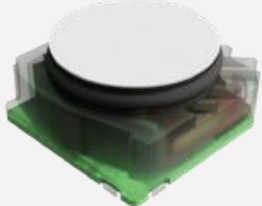
Higher Mass therefore continuous power is needed. The structure of the sensor makes it more prone to impact resulting in breaking.



LPC

LPC is an industrial-suited MEMS (Micro Electro Mechanical System) pellistor which has been developed for a new generation of lower-power LEL sensor. The MEMS technology removes the impact problem on traditional LEL sensors.

LEL Sensors

			Sensor Advantages	Sensor Disadvantages
SST4 Micro LPC		LPC	<ul style="list-style-type: none"> • Fast response time for light Hydrocarbons • Not impacted by shock through impact • Cost-effective; ideal for compliance market • Low power consumption 	<ul style="list-style-type: none"> • Will not see heavy hydrocarbons, nonanes etc • Silicone poisoning over time when filter becomes saturated
SST Mini NDIR, HPC		HPC	<ul style="list-style-type: none"> • Sees heavy Hydrocarbons like Nonanes / Methanals 	<ul style="list-style-type: none"> • Lower battery runtime due to super high power • Beads impacted by dropping and could become damaged • Silicone poisoning
SST4 Pump LPC, NDIR, HPC		NDIR	<ul style="list-style-type: none"> • Very low power up to two months runtime • Long lifetime up to 10 years • No silicone poisoning • Can be used for Inert application as does not require O2 	<ul style="list-style-type: none"> • Cannot detect H2 and Acetylene • Not linear signal so over-measure on heavier HC • Technology is not the cheapest, but lifetime and runtime compensate for the cost

LEL Sensors

In traditional catalytical sensors there has always been multiple options for filtered and none filtered sensors. The filtered sensors are removing the H₂S and reduces the sensor poisoning effects, the downside is the limitation of measuring heavier Hydrogen Carbons. The Unfiltered sensor will see heavier Hydrogen Carbons but will be prone to H₂S contamination.

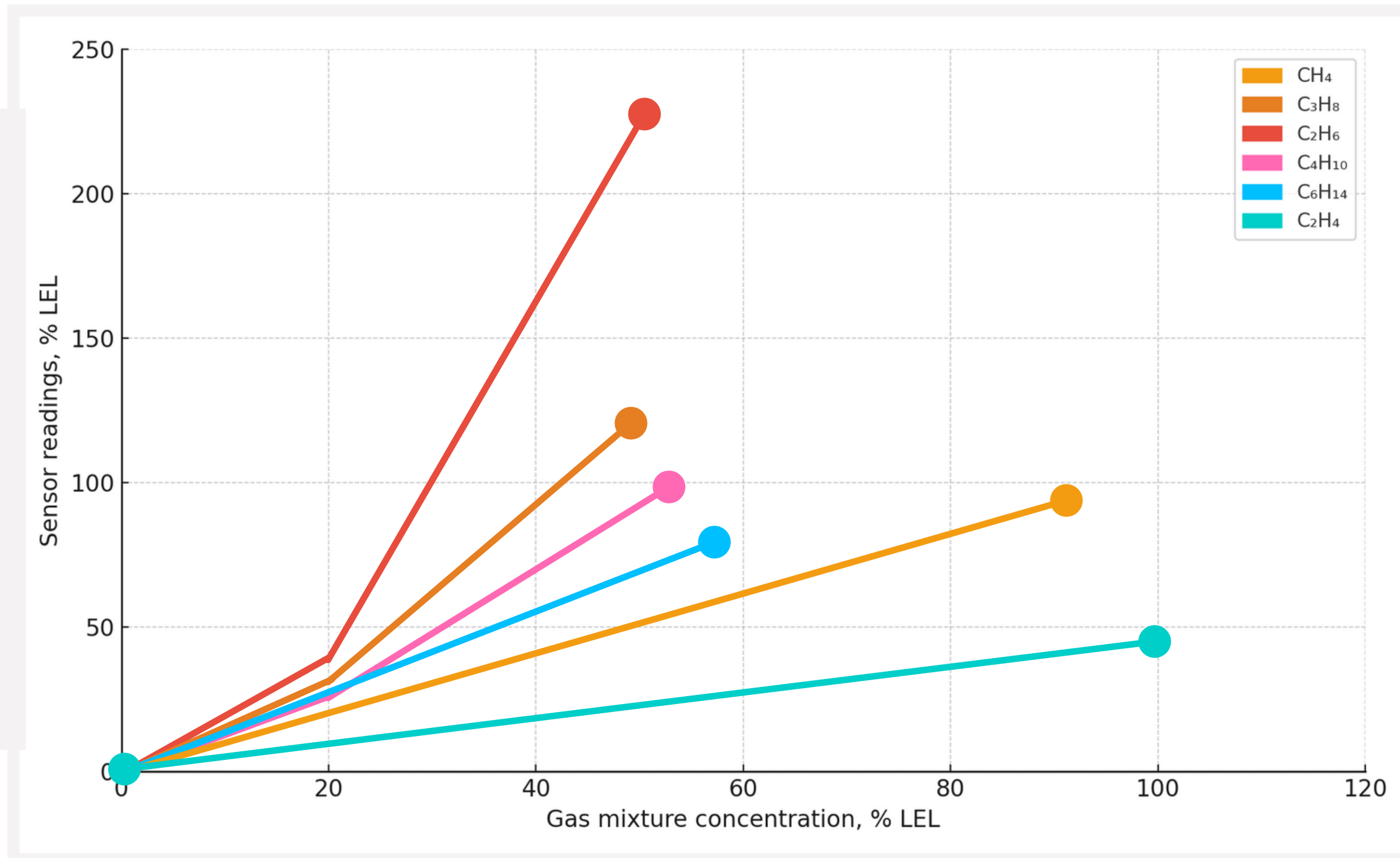
The reason for HPC

HPC none filtered for the heavy gasses

Gas/Vapor
Methane (CH ₄)
Propane (C ₃ H ₈)
n-Butane (C ₄ H ₁₀)
n-Pentane (C ₅ H ₁₂)
Hexane (C ₆ H ₁₄)
Heptane (C ₇ H ₁₆)
Octane (C ₈ H ₁₈)
Nonane (C ₉ H ₂₀)
Hydrogen (H ₂)
Methanol (CH ₃ OH)

LPC filtered

Gas/Vapor
Methane (CH ₄)
Propane (C ₃ H ₈)
n-Butane (C ₄ H ₁₀)
n-Pentane (C ₅ H ₁₂)
Hexane (C ₆ H ₁₄)
Hydrogen (H ₂)



NDIR Sensor

Light absorption technology serves many markets very well with its long life and low power consumption.

The downside of the technology is slower response, linearity between Hydro Carbons and condensation prone false response with rapid temperature shift.

Toxic Sensor Technology Evolution

Old Technology



New Technology



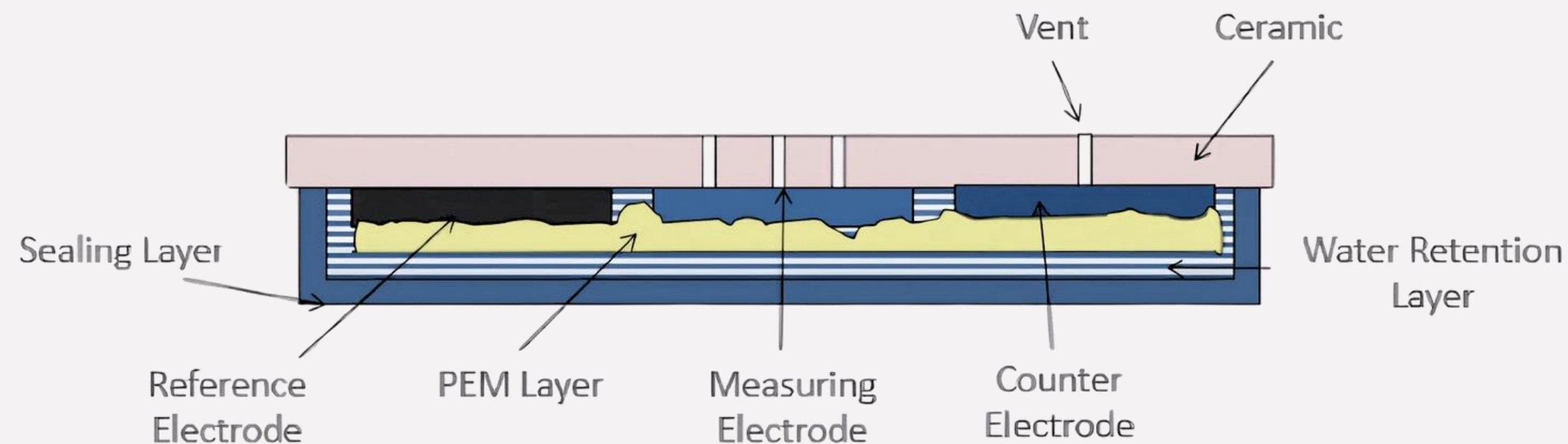
Solid State Sensor (No electrolyte):

- Better response time t₉₀ under 10 Seconds
- Quicker recover to capillary shock, pressure
- No leak or housing burst due to Electrolyte expansion
- Will not dry out and die. (Utilized on the fixed products) Made in Germany

Toxic Sensor Technology Evolution

How is this possible?

The core liquid is polymerized, in sort it means the liquids with a binding chemical becomes a solid material.
Just like a battery.

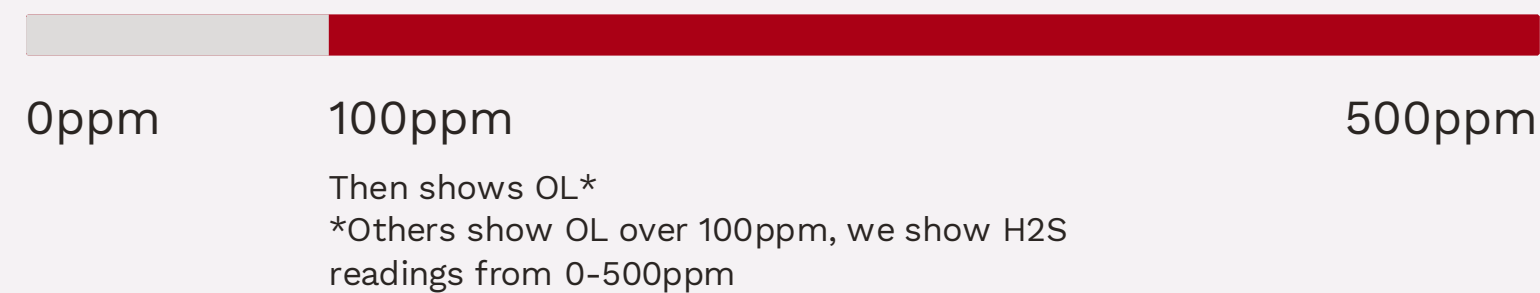


Youtube search for "nylon rope trick"

Gasses



Hydrogen Sulphide Warning Signs 500 ppm Range



- Measuring hydrogen sulfide (H₂S) levels ensures workers' safety in specific industries such as oil and gas, wastewater treatment, and pulp and paper mills.
- High levels of H₂S exposure can irritate the eyes, nose, throat, and respiratory system. It can also cause dizziness, nausea, and headache, and in extreme cases, can lead to unconsciousness, coma, and even death.
- As a responsible employer, it's crucial to prioritize the safety and well-being of workers by ensuring that proper safety protocols and monitoring are in place. Doing so can create a safe work environment and avoid harmful exposure to H₂S and other toxic gases.

<1 ppm

Most people smell "rotten eggs"

3-5 ppm

Odour is strong

20-150 ppm

Nose and throat feel dry and irritated. Eyes sting, itch, or water. "Gas eye" symptoms may occur. Prolonged exposure may cause coughing, hoarseness, shortness of breath, and runny nose.

150-200 ppm

Sense of smell is blocked (olfactory fatigue)

200-250 ppm

Major irritation of the nose, throat, and lungs occurs, along with headache, nausea, vomiting, and dizziness. Prolonged exposure can cause fluid buildup in the lungs (pulmonary edema), which can be fatal

300-500 ppm

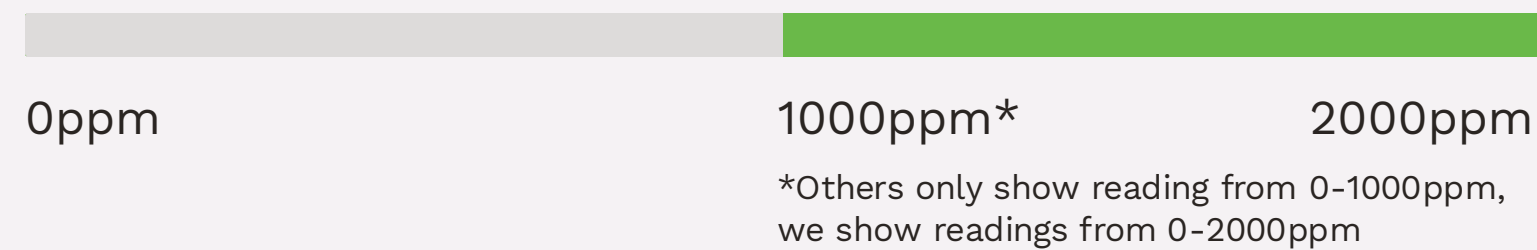
Symptoms are the same as above, but more severe. Death can occur within 1 to 4 hours of exposure

>500ppm

Immediate loss of consciousness.
Death is rapid, sometimes immediate

Carbon Monoxide Levels Chart

2000 ppm Range



- Carbon monoxide (CO) poses a significant threat to human health due to its colourless, odourless, and tasteless nature.
- Although largely associated with home appliances and vehicles, carbon monoxide exposure is a potential risk in workplaces such as steel production and heavy industries.
- Understanding the dangers associated with CO exposure and implementing gas detection systems can help safeguard the well-being of both individuals and employees.

0 ppm

Recommended Safe Level

6 ppm

WHO 24 Hour Average

9 ppm

ASHRA 8 Hour Average NAAQS 8 Hour Average
EPA 8 Hour Average WHO 8 Hour Average

25 ppm

ACGIH 8 Hour Average

30 ppm

WHO 1 Hour Average

35 ppm

NIOSH 8 Hour Average Physical symptoms*
NAAQS 1 Hour Average after 6–8 hours.

50 ppm

OSHA 8 Hour Average (PEL)

30–69 ppm

UL 30 Day Alarm

87 ppm

WHO 15 Minute Average

70–149 ppm

UL 1–4 Hour Alarm

200 ppm

NIOSH 15 minute STEL

150-399 ppm

UL 10-50 Minute Alarm
Physical symptoms** after 2-3 hours.

400+ ppm

UL 4 Minute Alarm
Physical symptoms** in 1–2 hours.
Life threatening 3 hours.

800 ppm

Physical symptoms** in 45 minutes.
Unconscious in 2 hours.
Fatal in 2–3 hours.

1600 ppm

Physical symptoms** in 20 minutes.
Fatal within 1 hour.

3200 ppm

Physical symptoms** in 5–10 minutes.
Fatal within 25–30 minutes.

6400 ppm

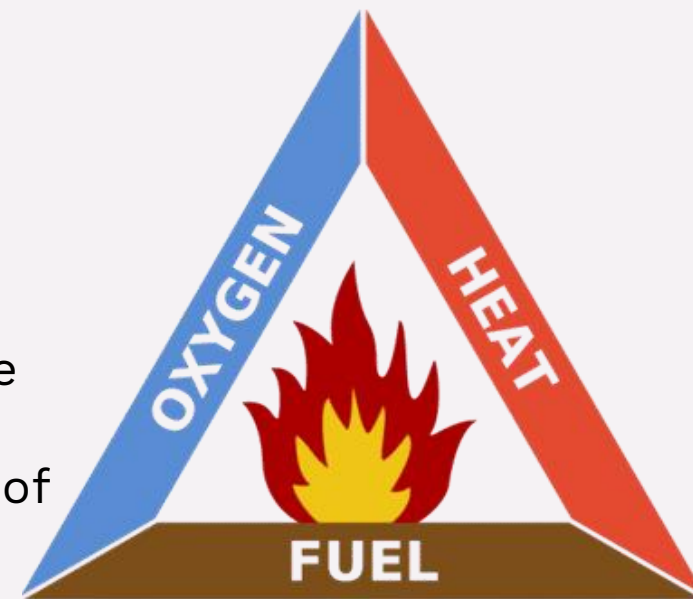
Physical symptoms** in 1–2 minutes.
Fatal within 10–15 minutes.

12800 ppm

Fatal within 1–3 minutes.

Flammable Sensors

The fire tetrahedron is a four-sided geometric shape used to describe the three components are required for a fire to start and sustain itself – heat, oxygen and fuel. These three components must be present simultaneously in order for a fire to be created. Fire suppression techniques revolve around removing one or more of these elements, making it impossible for a fire to start or sustain itself.



Flammable Sensor Terminology

LEL – Lower Explosive Limit

Minimum concentration of a combustible gas or vapour in air which will ignite if an ignition source is present.

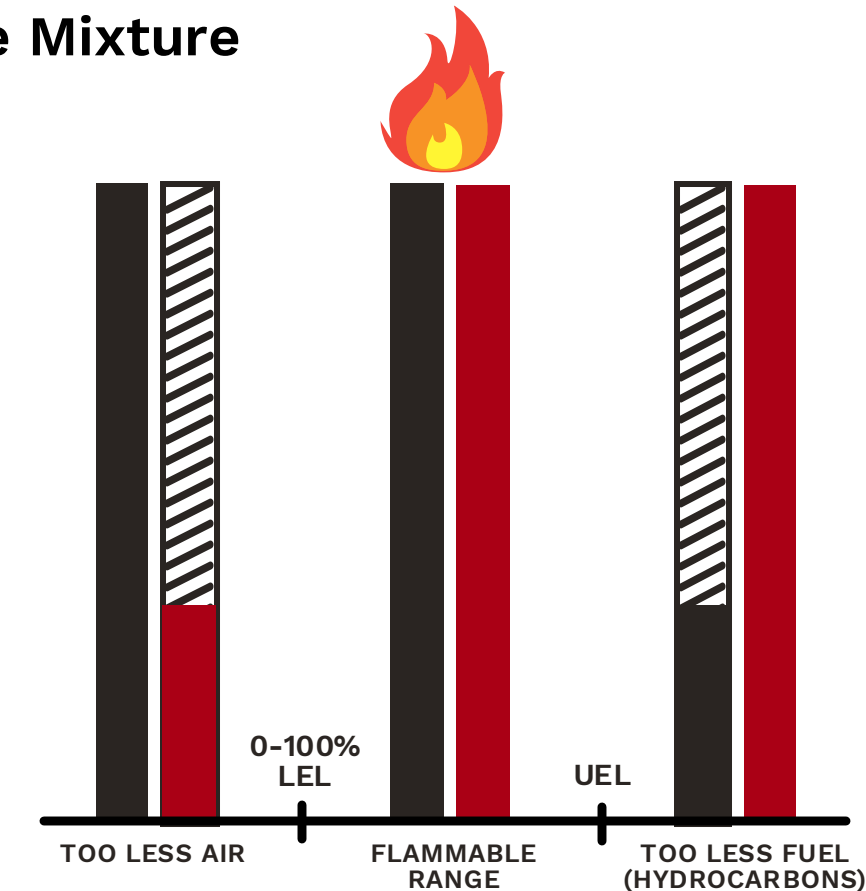
LEL – Lower Explosive Limit

The maximum concentration in air which will support combustion. Concentrations above UEL to enriched to burn.

Flammability Range

The range between 100% LEL and the UEL. Within flammability range gases will burn or explode if ignition source present, like a spark or even static.

Flammable Mixture



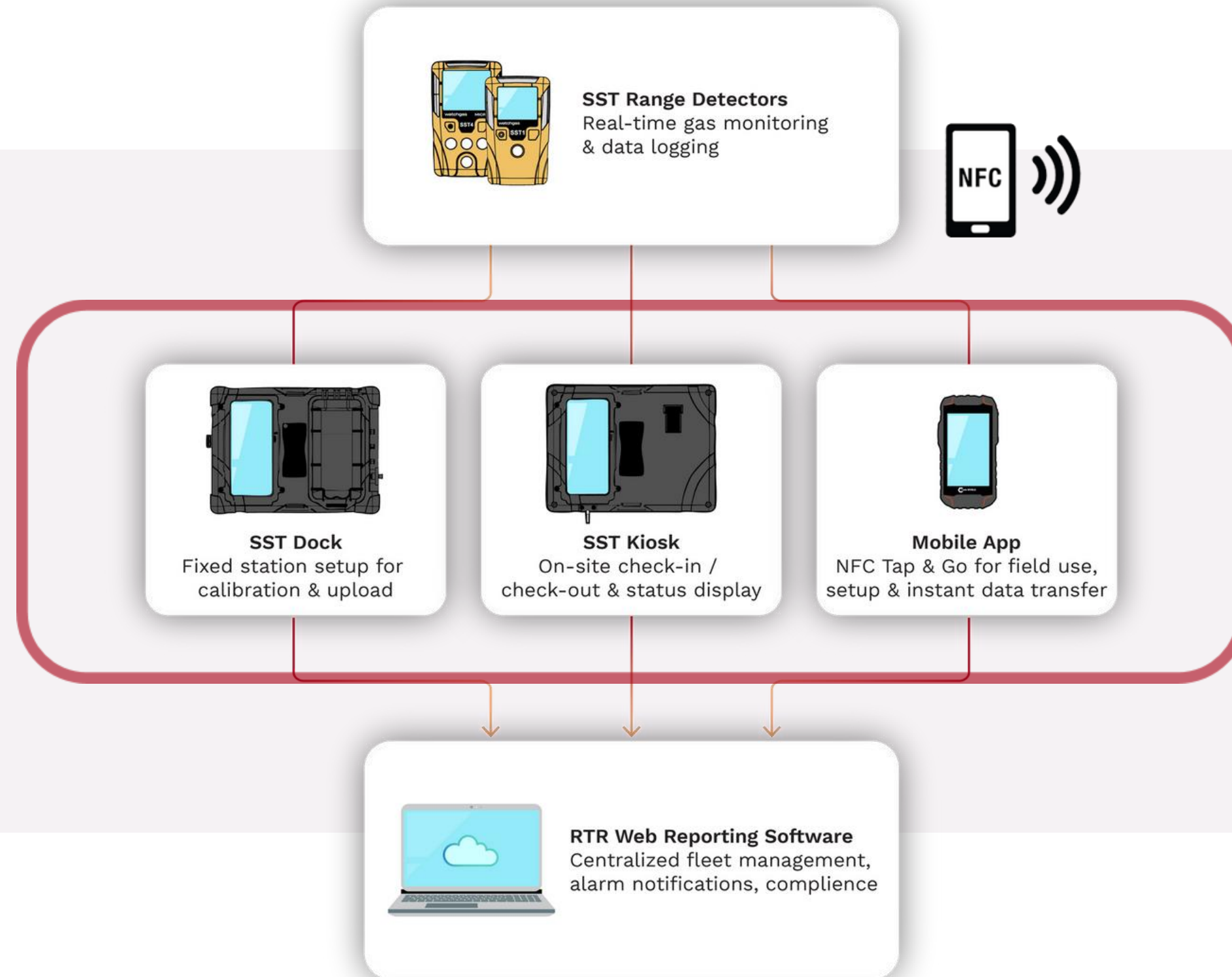
Gas Type	LEL	UEL
Methane	5%	15%
Propane	2.20%	9.50%
Acetone	2.60%	12.80%
Ammonia	16%	25%
Carbon monoxide	12.50%	74%
Ethylene oxide	3%	100%
Hydrogen sulphide	4.30%	46%

NOTE: This table refers to USA standards



Product Details

Application Based Products Infrastructure



Technology enabler

WatchGas' proprietary NFC communication protocol enables the data transfer.

SST4 Product Presentation

- Evacuate within a few seconds with best-in-class gas sensors fast response time.
- Accelerate decision-making and evacuation response with the SST4 Micro and Mini, featuring an industry-leading extra-large display—typically 13% larger than competitors—and protected by extended screen bumpers.
- Easily worn in the breathing zone, the SST4 Micro and Mini are typically 43% smaller and 12% lighter than other 4-gas diffusion portable detectors.
- One button operation with simple to use interface.



SST4 Product Presentation

SST 4 Mirco

- 1 version based on LPC sensor

SST4 Mini

- 1 version based on IR sensor
- 1 version based on standard CAT sensor

SST4 Pump

- 1 version based on LPC or IR (remember to change in the application)
- 1 version based on standard CAT sensor

NOTE:

PCB boards are different so no changing boards between models.



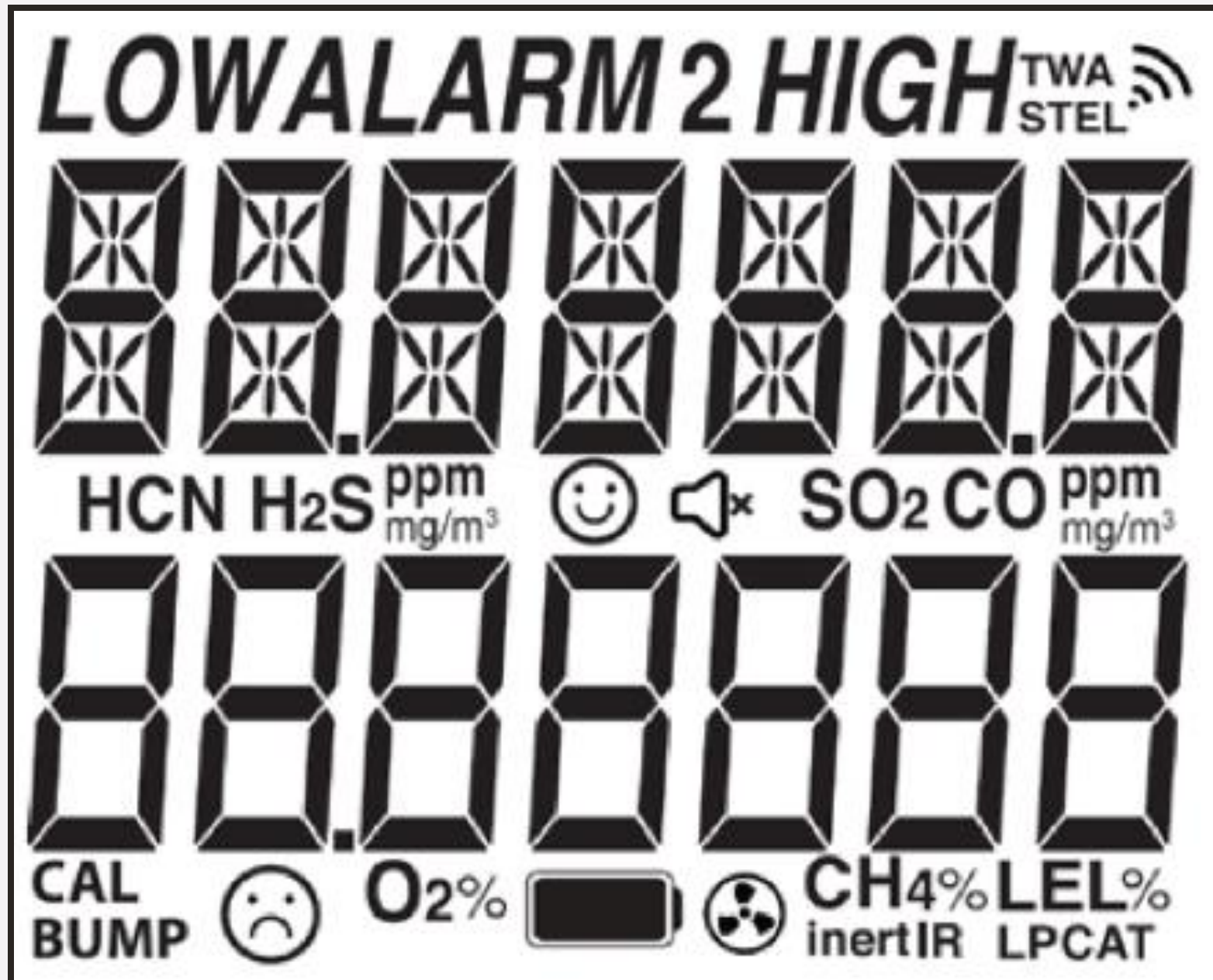
SST4 Product NFC

- NFC center location.
- Locate your NFC on the phone



- Other Left side top center top or sometimes center phone
- Product code

SST4 Display Layout



ALARM	
ALARM	Alarm Notification
LOW	Low Alarm
HIGH	High Alarm
STEL	Short Term Exposure Alarm
TWA	Time Weighted Average Alarm
2	Indicate LOW LOW or HIGH HIGH alarm, 3rd alarm level
SENSORS	
HCN	Hydrogen cyanide Sensor
H₂S	Hydrogen sulfide Sensor
SO₂	Sulfur dioxide Sensor
CO	Carbon monoxide Sensor
O₂	Oxygen Sensor
IR	NDIR LEL
LPC	Low Power Catalytic
CAT	Catalytic bead LEL sensor
INFORMATION	
	Product Compliant
	Product Non-Compliant
CAL	Calibration Required
BUMP	Bump Required
	NFC in Communication
	Battery Level
	Mute
	Pump ON
UNIT OF MEASURE	
ppm	Parts Per Million
mg/m³	Milligrams per Cubic Meter
LEL%	Percentage LEL
O₂%	Percent VOL

SST4 Button Operation



Button operation

- Power on: Press and hold “button” will show and a count down from 3 will start
- NFC on: press button for 1,5 sec and NFC antenna will be active
- Enter menu: 2 quick press – show settings
- Power off: press and hold and the 3 second count down will start
- Compliance check
 - 😊 Indicates all is good
 - ☹ Indicates compliance check is needed.
- Compliance check is a simple reminder to TAP the unit in the system or if something is wrong it will also ask for a TAP.

SST4 Auto Cal



Power down
OFF keep pressing

CAL
3 sec count down

Zero cal
30 sec

CAL?
Press button to stat span

- If span is not selected the unit will go back to main menu.
- Only zero adjustment done.

SST4 Pump & Filter

On start up the pump needs to be blocked for function check – 3 retry before the unit goes in fault. Build in protective filter.

When using the SST4 Pump with active pump always use external filter PN: 008-3022-001, inspect external for contamination and replace as needed.

1. Visual Alarm	Under Cover:	8. LEL sensor
2. Display	5. Oxygen sensor	9. Pump Cover
3. Audio Alarm	6. Toxic sensor	10. Gas outlet
4. Button	7. Toxic Sensor	11. Filter
		12. Gas inlet

SST4 Pump



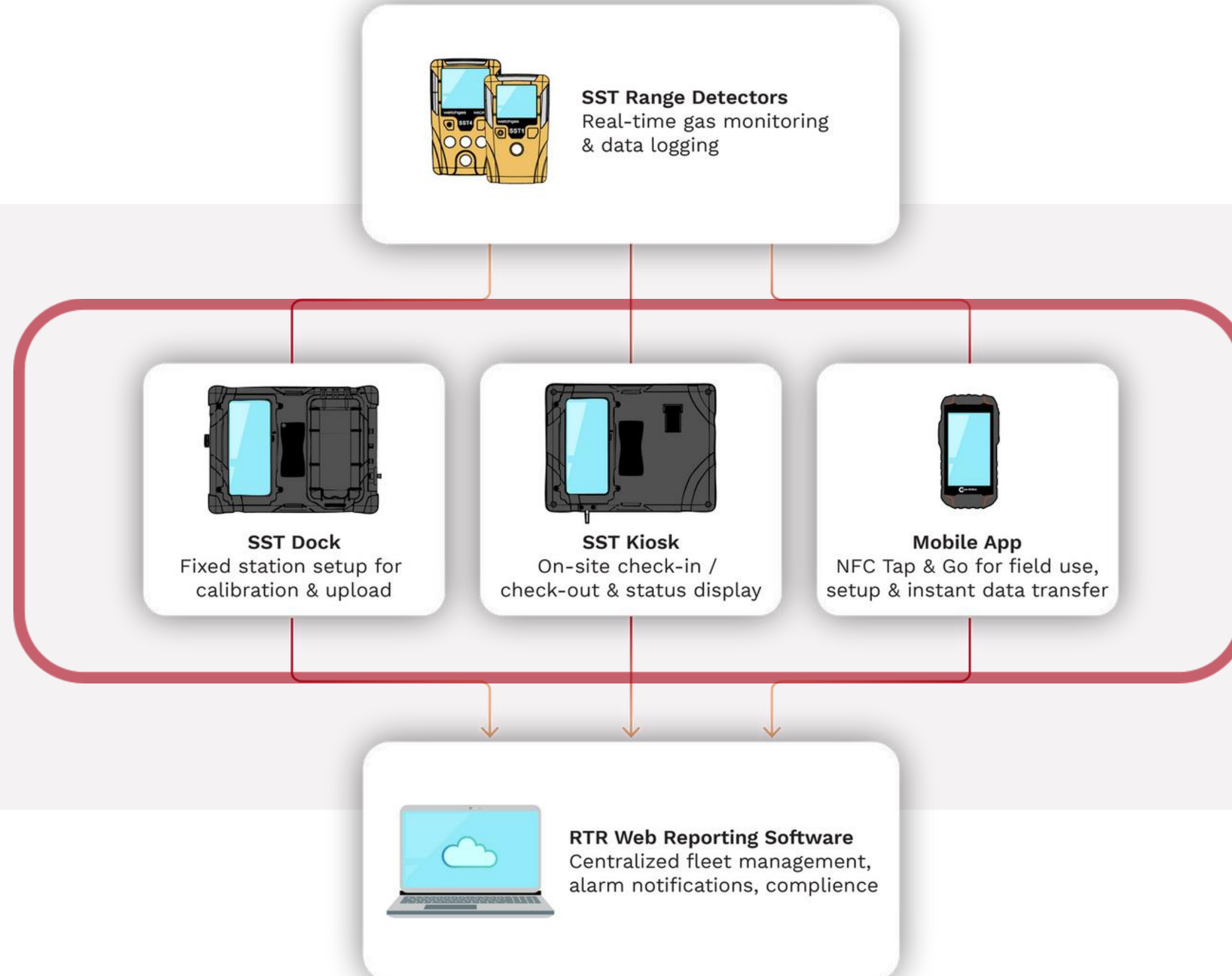
- If the gas plate is removed, the pump will stop and the unit will work as a diffusion model.
- Magnetic switch senses the cover.

NOTE:

The SST4 pump will only calibrate in pump mode to ensure the full unit is checked.

Accessories

RTR Solution Infrastructure



Free WatchGas Device Link Application

Application only:

Our intuitive 'tap and go' app allows you to:

- Compliance check
- Documented calibration compliant with ISO 17025 requirements no wrong calibration gas
- Documented bump test
- Easy access to data
- Easy product set up via saved config files.
- Intuitive User Interface
- New firmware versions automatically pushed to application

Additional features to note:

- Hibernation of single gas, Scan protection, datalog extract, easy to unassign. Compliance check. Automatic data push to RTR. Data sharing with app's, email ect
- No additional infrastructure – install the free app IOS and Android



SST Dock

- Multi product solution works with SST1, SST4 diffusion and SST4 Pumped.
- Easy setup of DOCK and devices
- Bump/calibration restriction options
- 5 to 8 Sec Rapid bump test /calibration using 50 cc gas
- Calibration certificate pdf for easy sharing
- Remove 4 screws install a SIM card or use WiFi/BLE
- Back up battery allowing the DOCK to be used in the field
- Low gas notification
- Automatically push new firmware to DOCK (not automatic update devices)
- Build in compliance check functions

Additional features to note:

- Hibernation of single gas, Scan protection, datalog extract, easy to assign/unassign. Compliance check. Automatic data push to RTR. Data sharing with app's, email ect Connectivity via SIM, WIFI or BLE, request user to acknowledge events. Wall or table mounting option, Build in diagnostics, interactive setup.



Compliance Kiosk

- The WatchGas Compliance Kiosk works as a terminal to allow the user to check in the gas detector, providing a full overview of the device status and any unforeseen events.
- If no need for calibration the Kiosk replaces the SST DOCK as a more cost efficient solution.
- Compliance check (Configuration verification)
- Remove 4 screws install a SIM card or use WiFi/BLE
- Health check
- Check in/out capabilities
- Compliant with RTR Web Reporting Software
- Assign unit/Unassign unit to site/person
- Extract data log

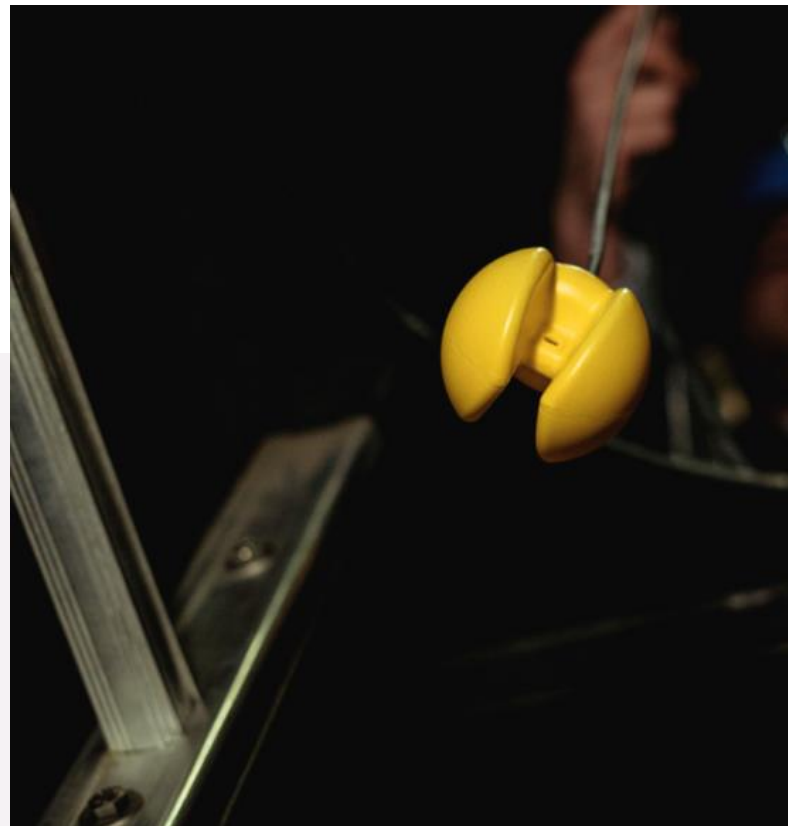
Additional features to note:

- Scan protection. Automatic data push to RTR. Data sharing with app's, email ect Connectivity via SIM, WIFI or BLE, request user to acknowledge events.



WatchGas Range Accessories

WatchGas Ball Float + Last-O-More Sampling Hose



For confined space sampling, WatchGas ball floats prevent dust and liquid from entering the hose. Fully redesigned for heavy-duty use and maximum protection.

Calibration Gas and Regulators



Wide range of Gas and regulators.

NOTE: Gas bottles include QR code for Mobile application

Probes



See probe brochure for details.

WatchGas Range Accessories



SST4 Mini/Micro Compliance Kit

Include charger and regulator



SST4 Pump Compliance Kit

Include charger and regulator



SST Dock Rapid Deployment Kit

Include charger and regulator

WatchGas Range Wireless Chargers

Wireless charging

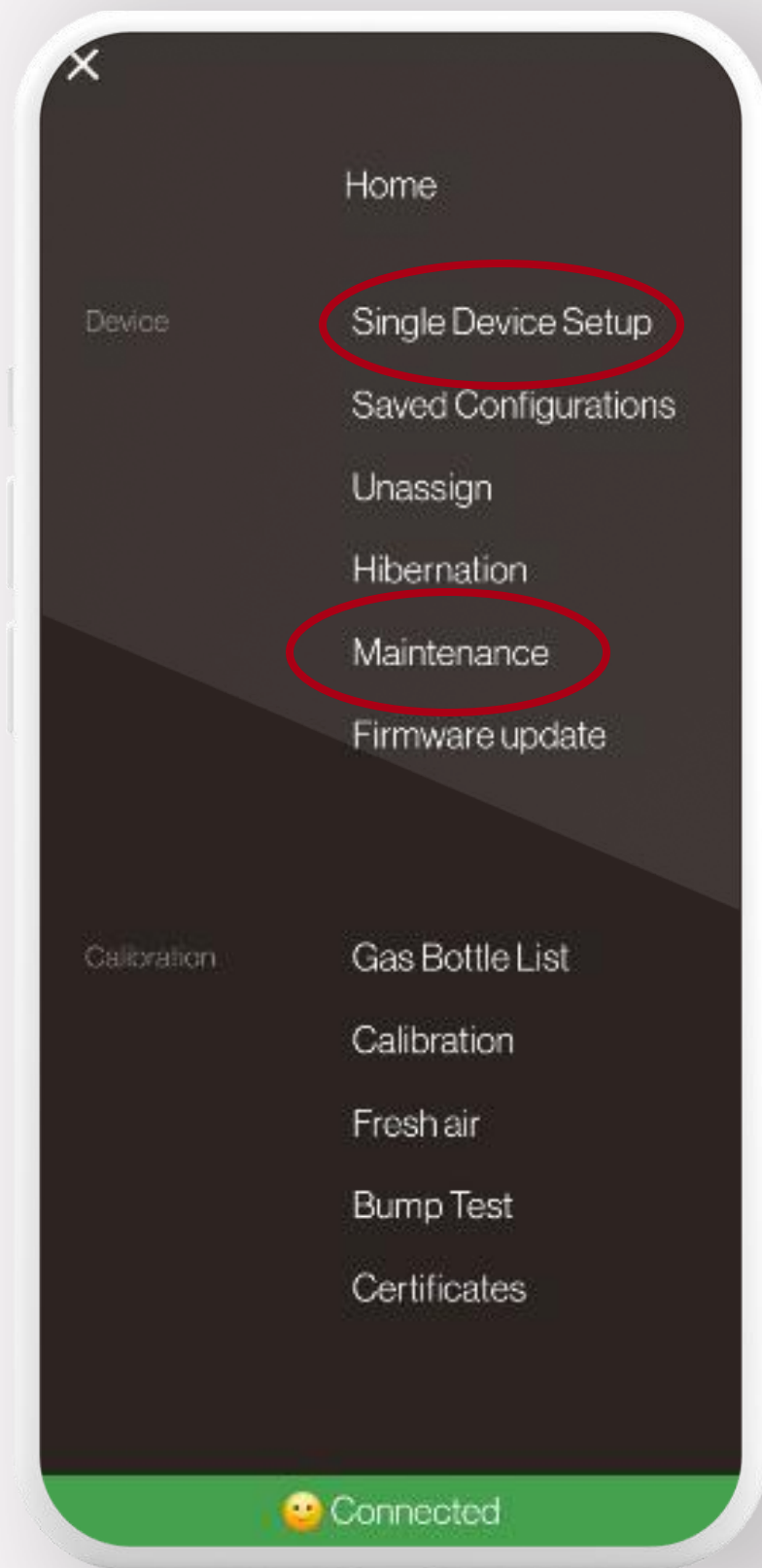
- No charger port contamination
- No leak or Broken port
- Charge anywhere even with power bank
- Less cables
- From 1 to 20 charger setup



Mobile App



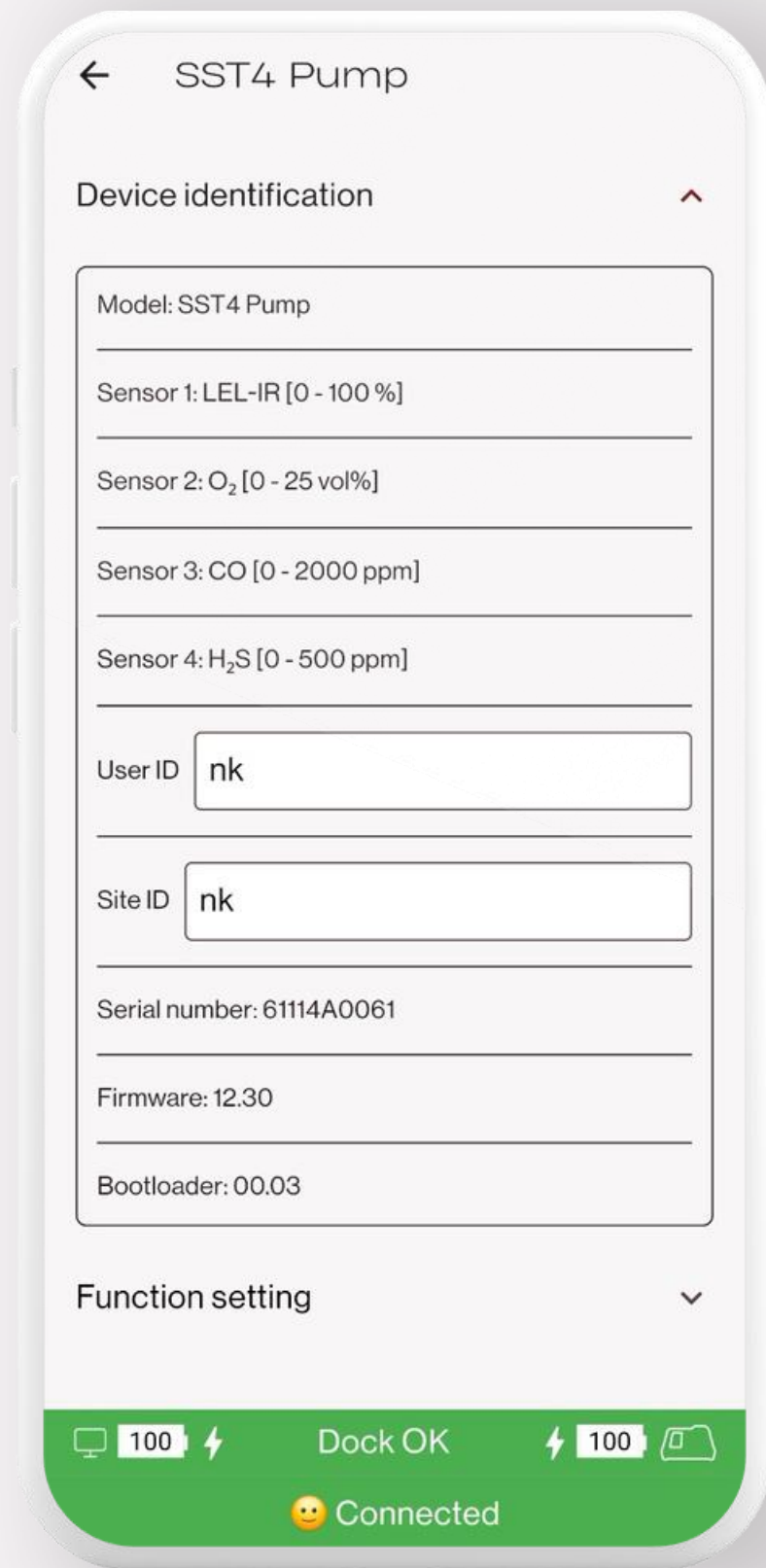
SST4 Setup



All application functions are covered in the application based presentation.

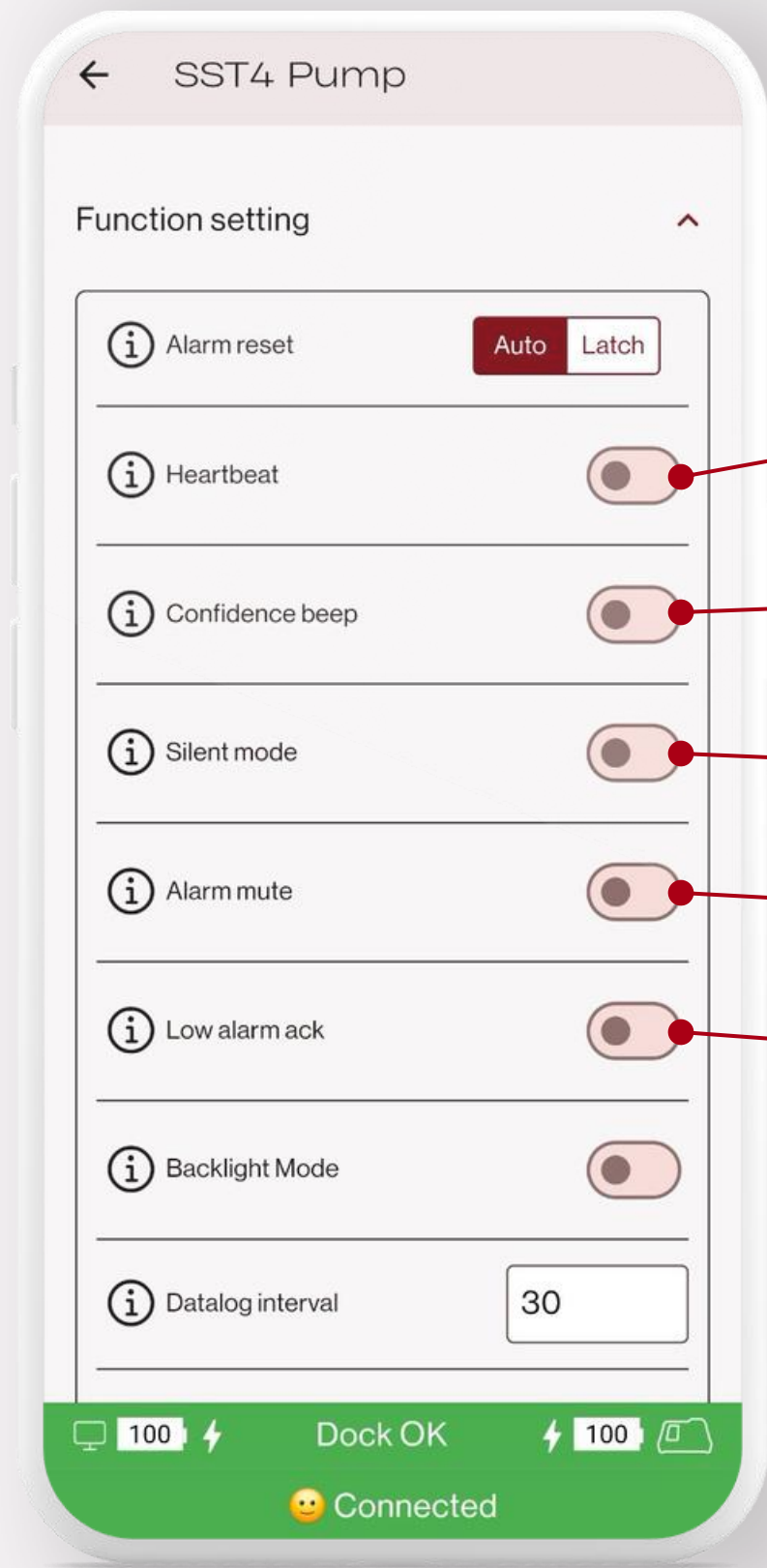
Here we will only look at the detailed settings for the SST4 product.

SST4 Single Device Setup



- Model
- Sensors installed
- User ID
- Site ID (do not confuse with RTR software Site ID)
- Firmware version

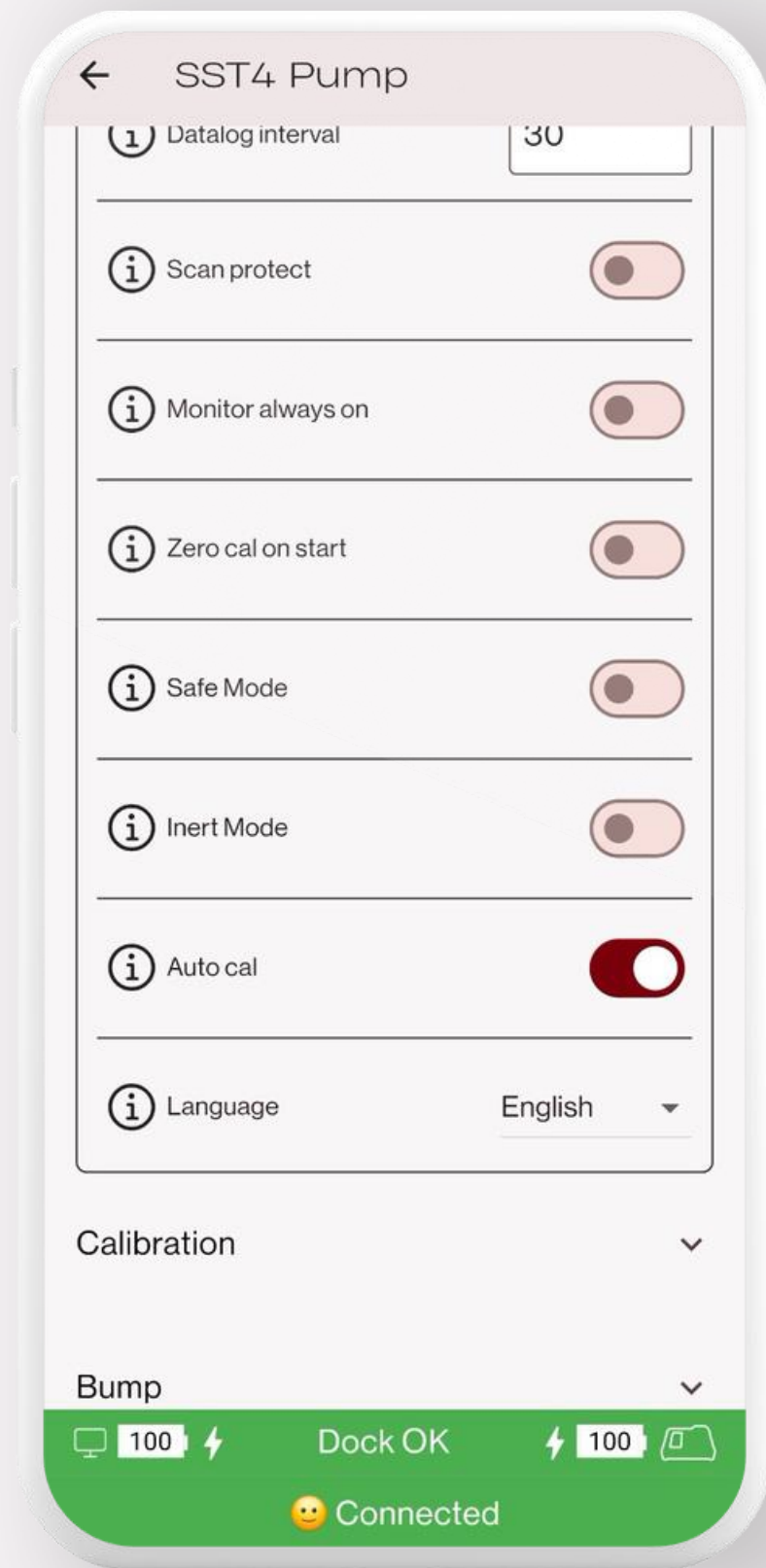
SST4 Single Device Setup



Auto reset or user confirmation

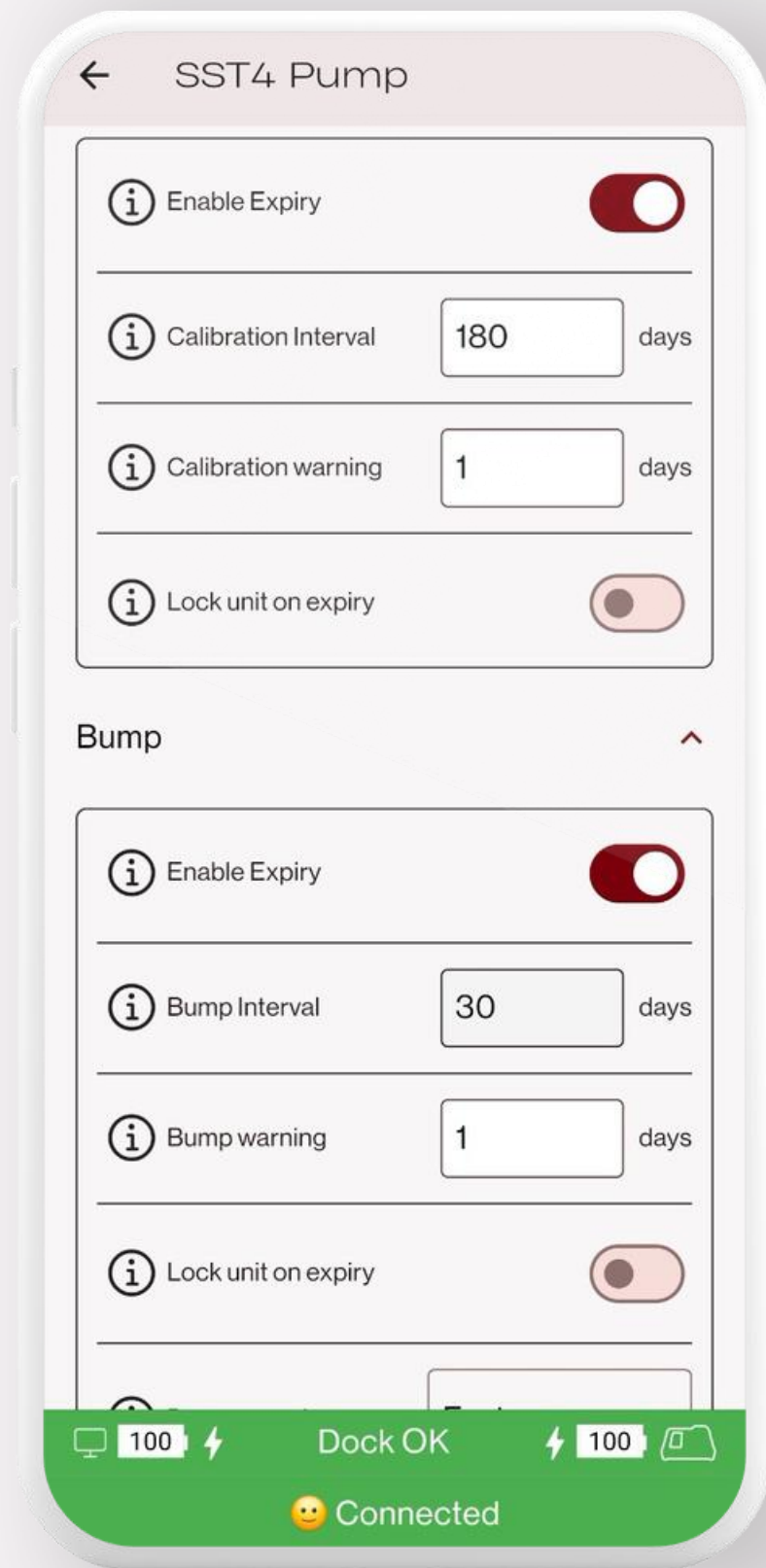
- Heartbeat – compliance green
How often shall the LED blink (use battery and too often annoys people)
- Confidence beep giving an audible indication the unit is compliant
- No buzzer, LED or backlight
- Mute alarm for 5 minutes
- If a low alarm you can confirm it and the unit is not alarming (repair job) if goes in high alarm then alarm is active again.
- Backlight on alarm or always on
- Data log interval 5 seconds to 120 sec.

SST4 Single Device Setup



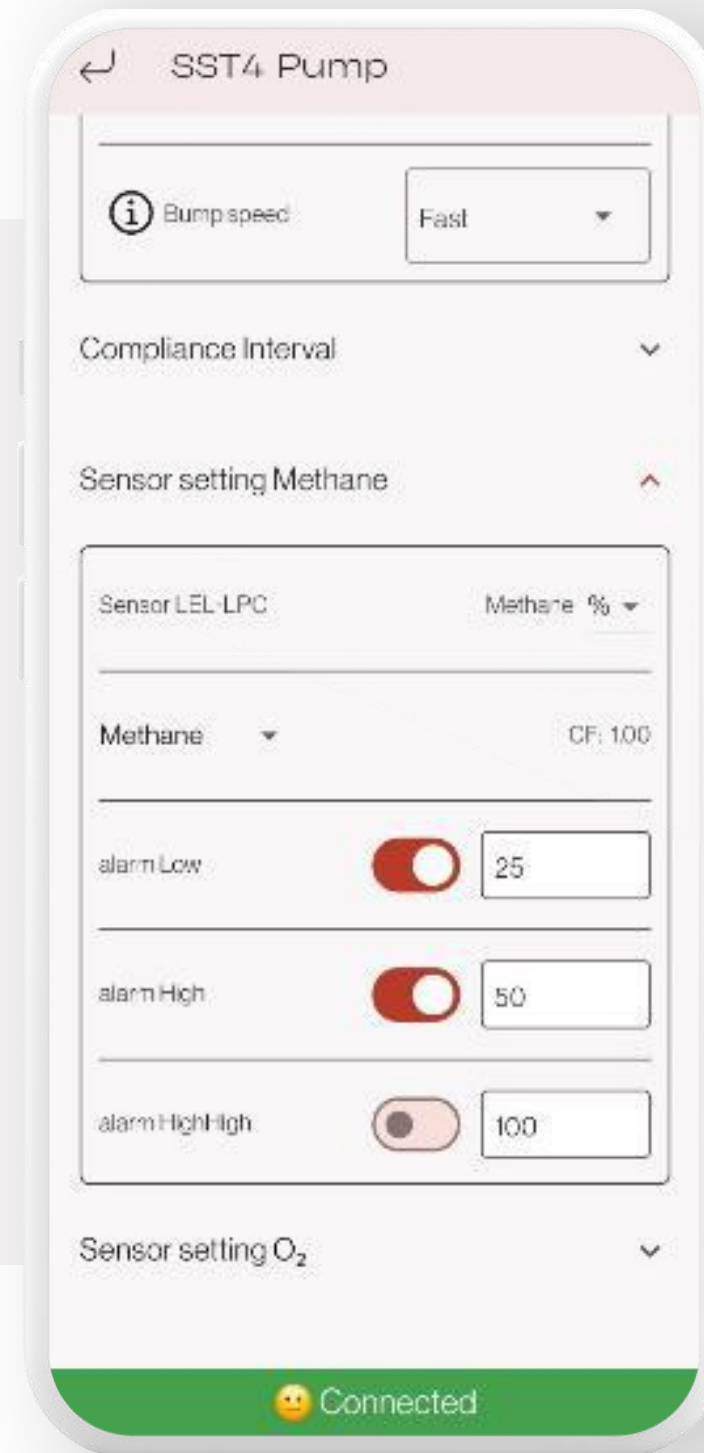
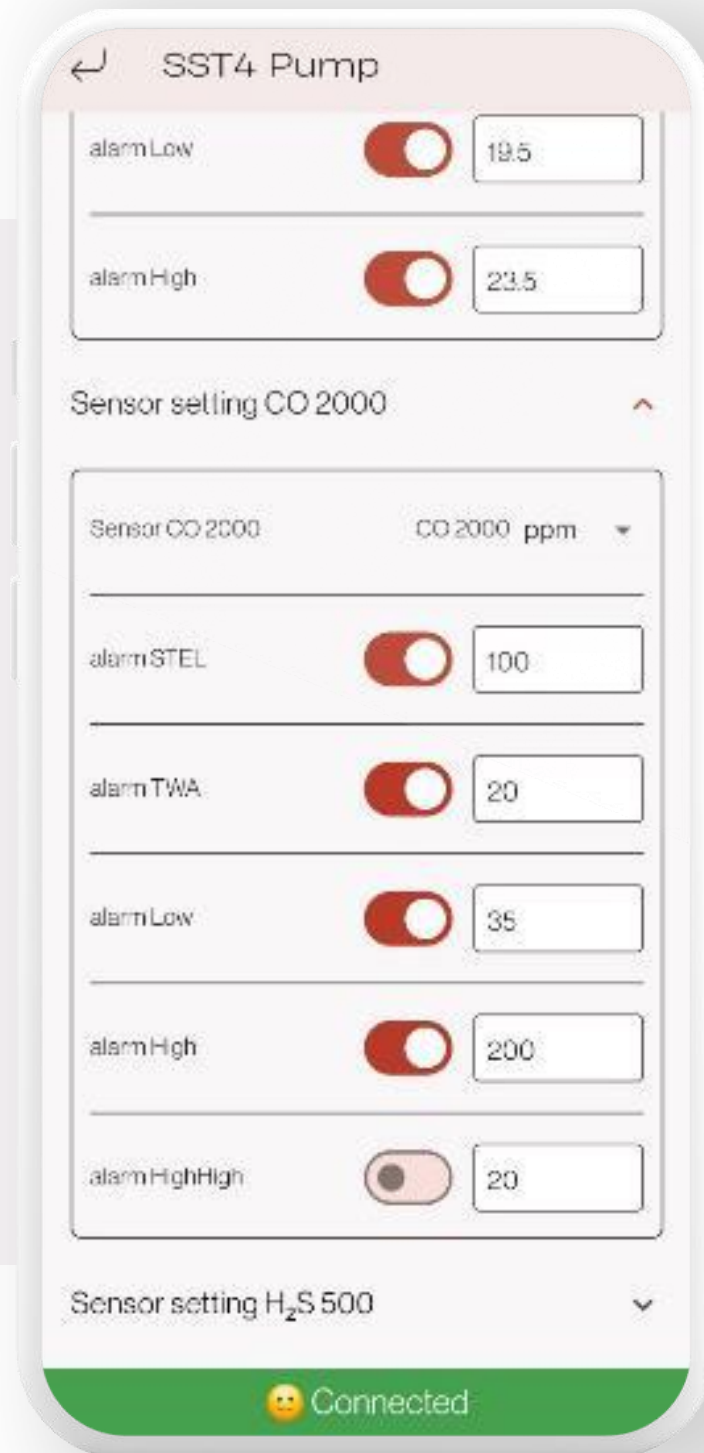
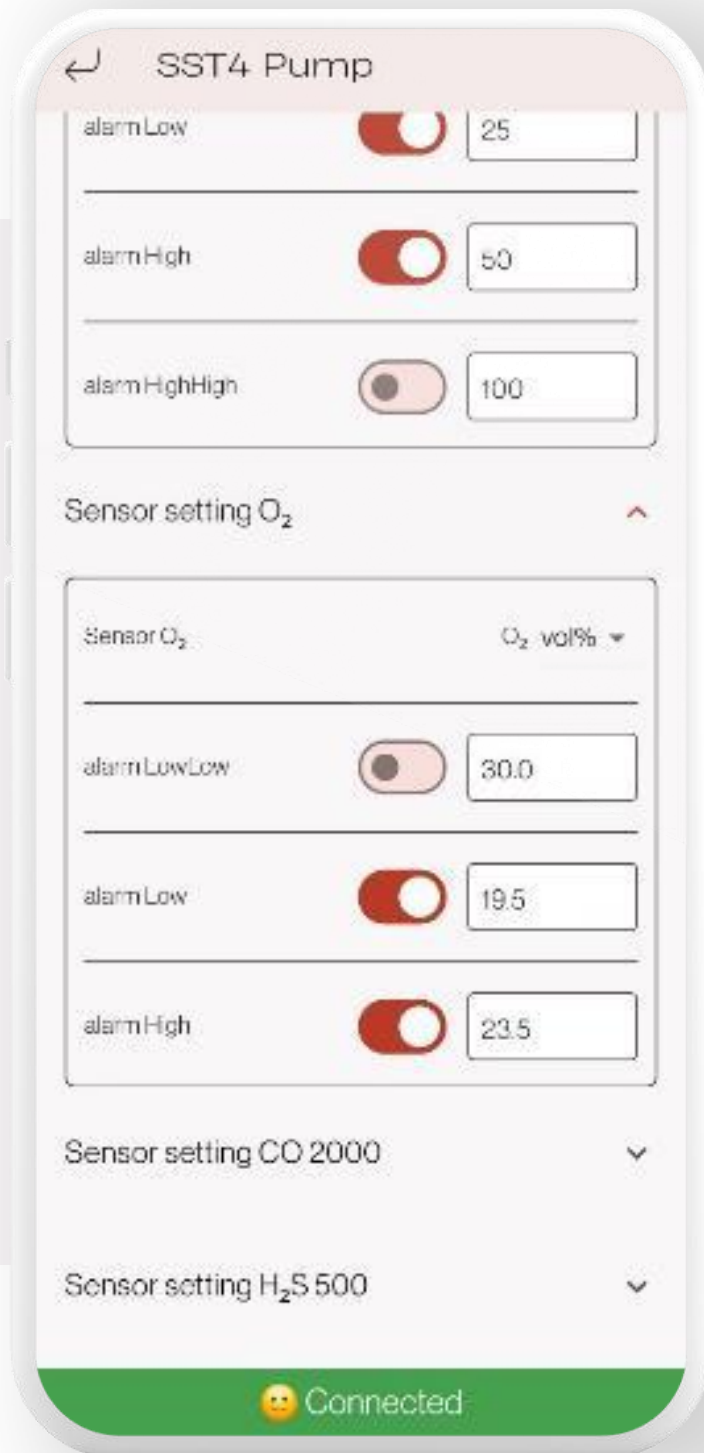
- PIN protection
- Cannot be switched off by user
- Auto zero cal when start
- Only display gas alarm when in alarm or will display safe
- Inert mode only SST 4 Pump with IR sensor
- Auto Cal – no app
- Language selection

SST4 Single Device Setup



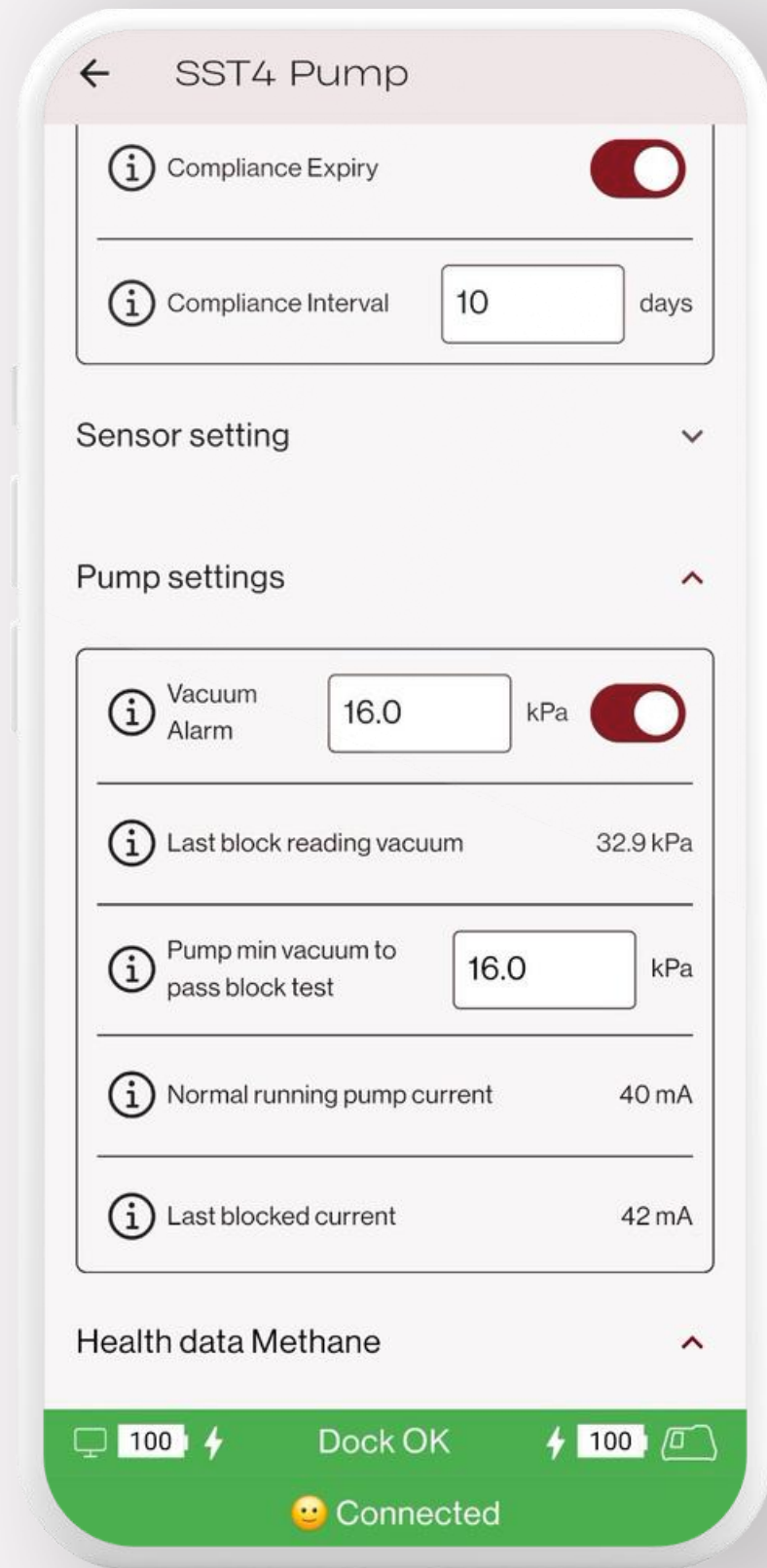
- Enable the function
- Set calibration interval
- Set warning prior to calibration expire
- Lock monitor if calibration not performed
- Fast = 50% medium = 70% slow = 90%

SST4 Single Device Setup



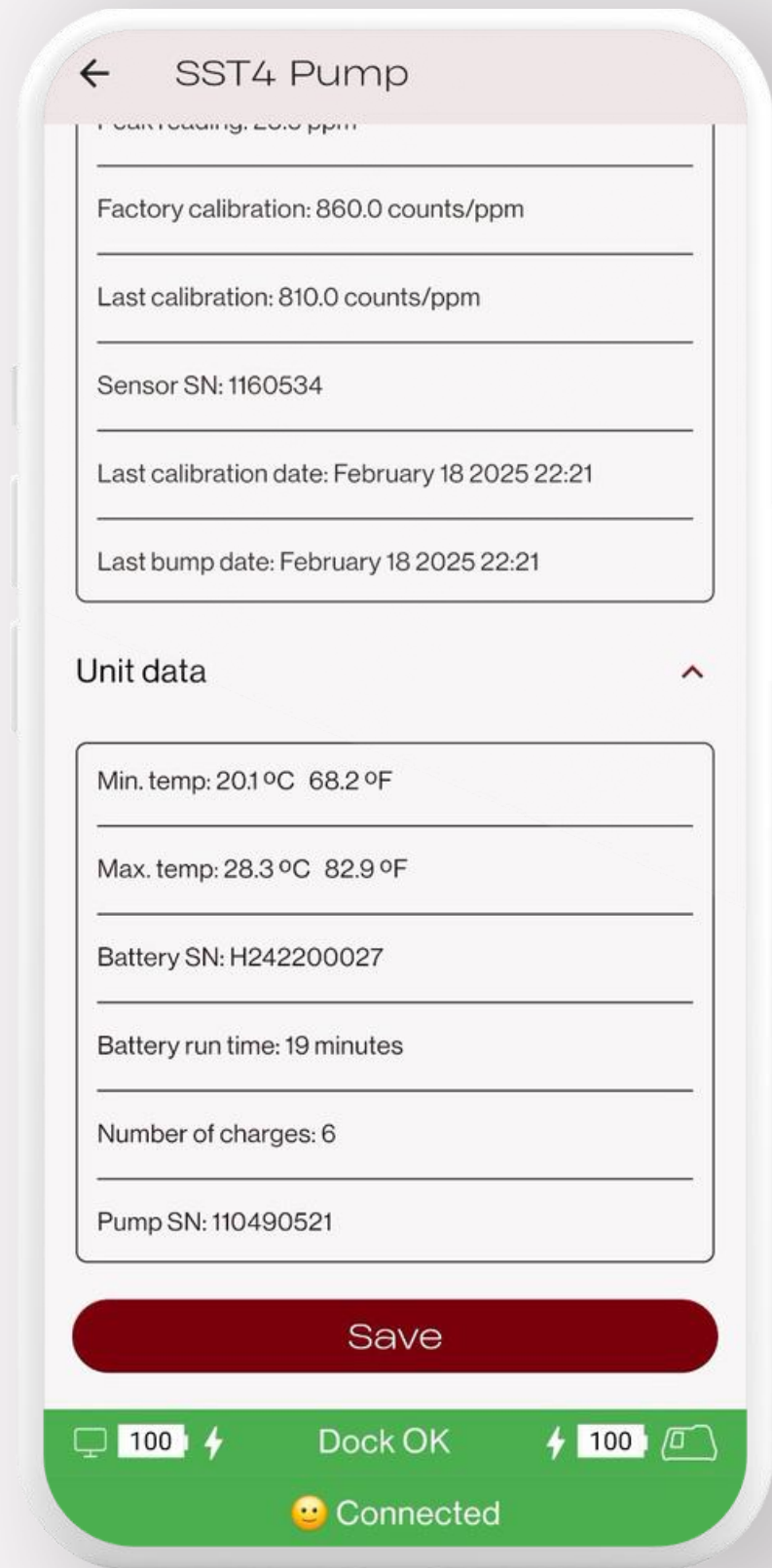
- Set alarms – TWA, STEL, High and LOW.
- Additional 3rd level alarm
- High/high
- Low/low
- LEL sensor select CF and measure gas

SST4 Single Device Setup



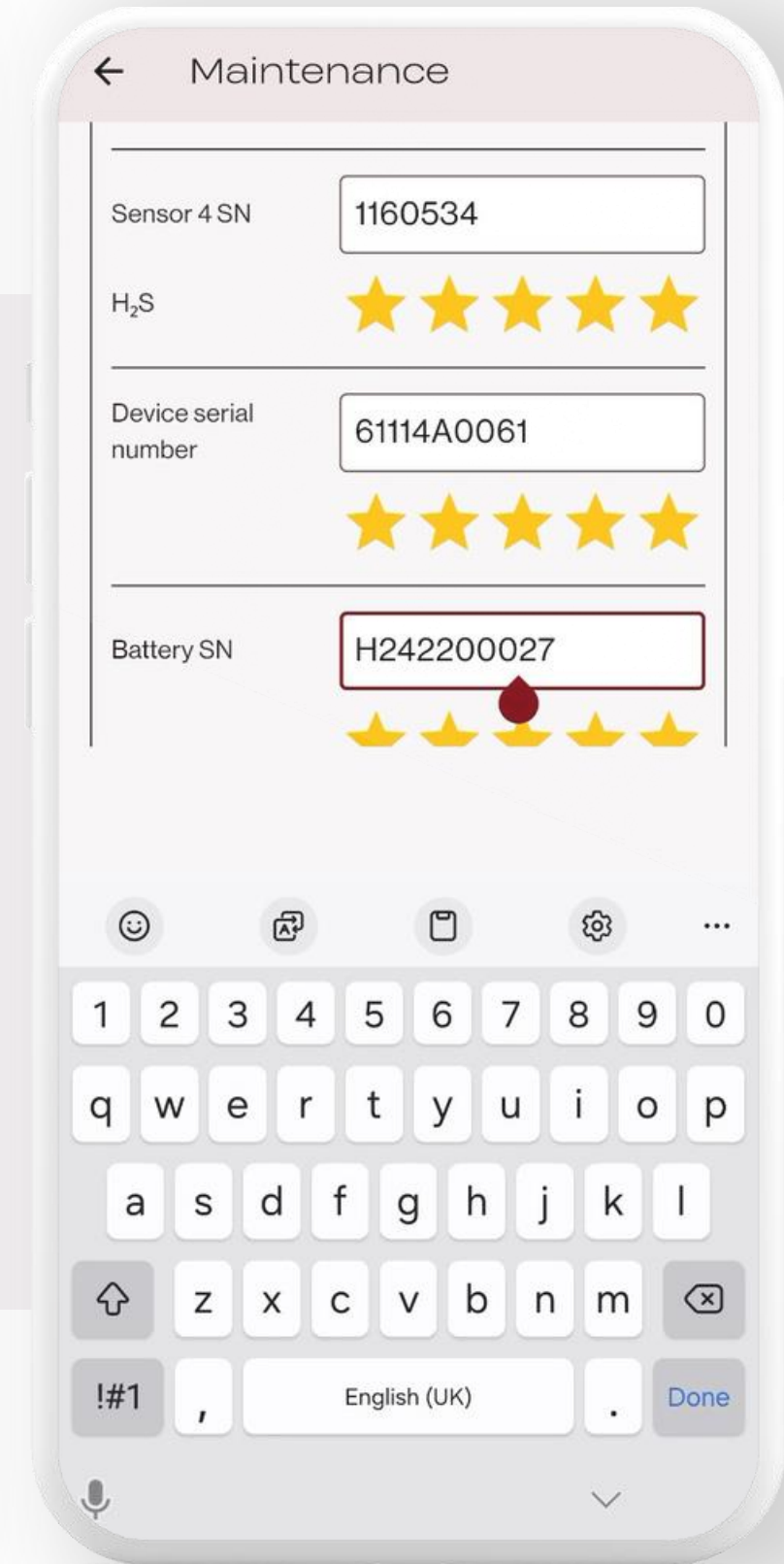
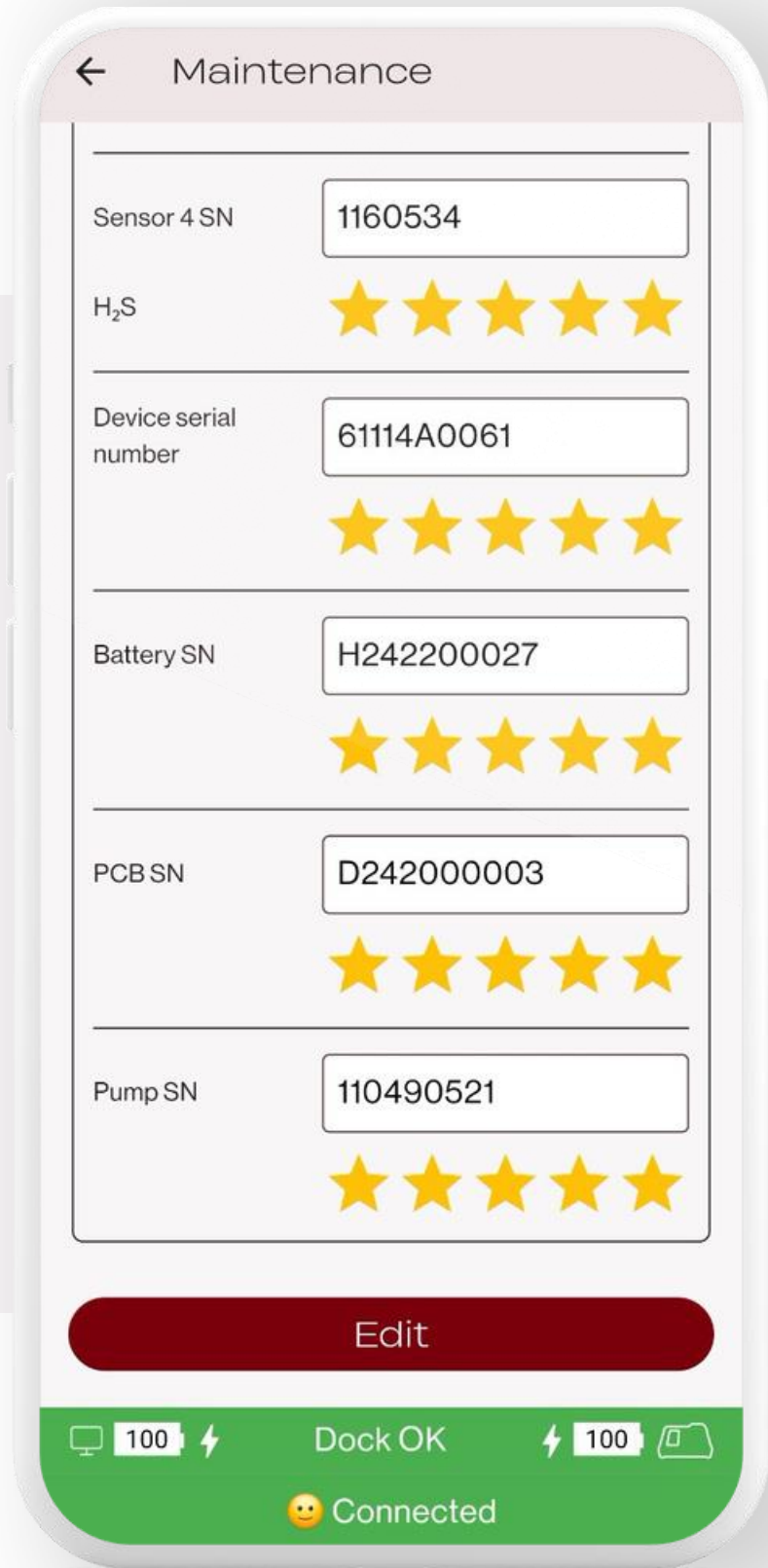
- Vacuum alarm during normal operation
- Last pump block reading – shows what vacuum the pump gave
- Minimum vacuum required to pass test on start up

SST4 Single Device Setup



- Factory calibration – first calibration of the sensor
- Last calibration – last calibration of the sensor
- These values are used to extract the sensor star rating
- How long was the last run – fully charge and drain battery will provide a maximum run time of the unit.
- Number of chargers on the battery

SST4 Maintenance

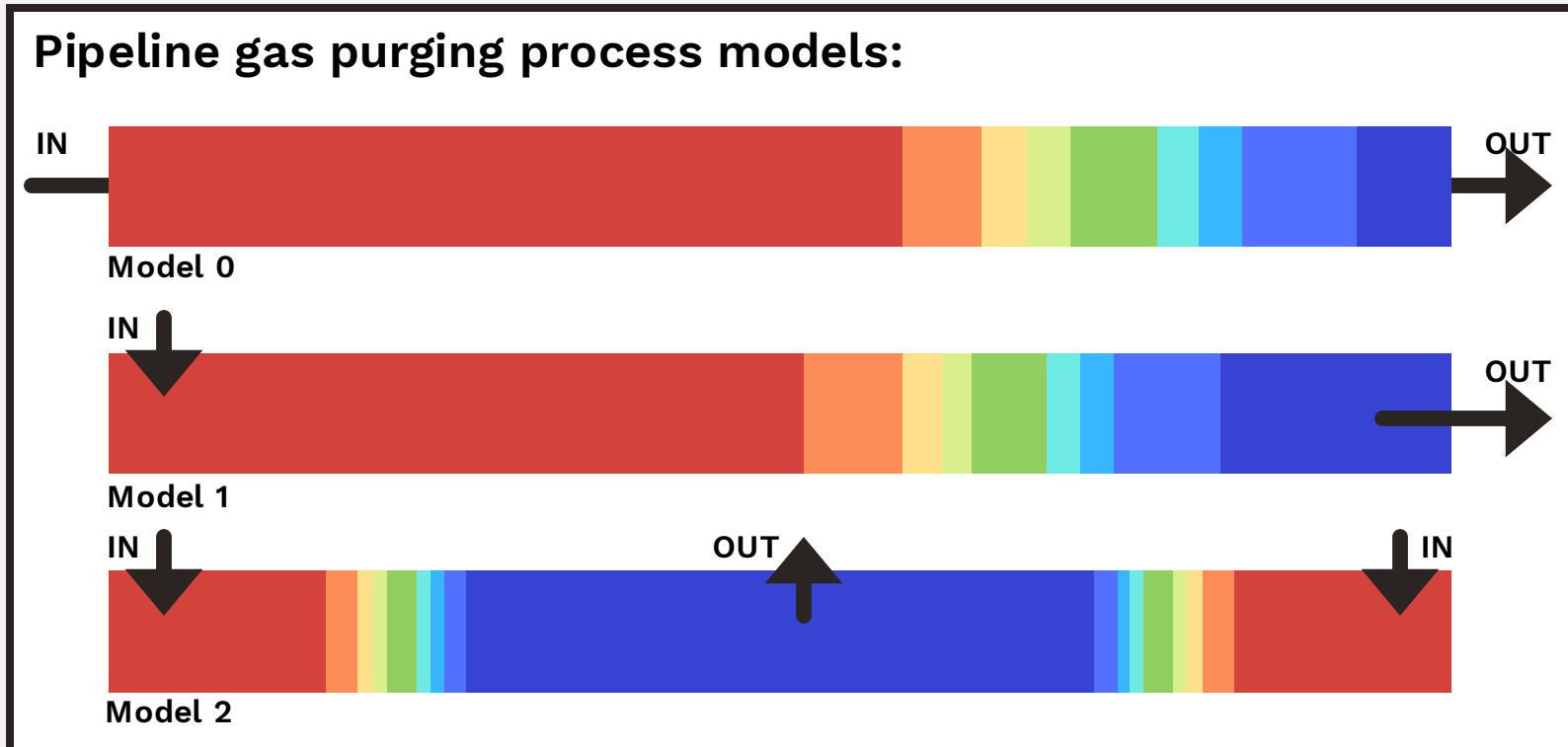


Star rating of the sensor signal output based on count/ppm and ppm hours exposed

Changing parts:

- Edit and set the new serial number – this will reset counters.

SST4 Pump Inert



Inert Firmware function:

Function:

- Above 19.5 % no alarms and above high alarm setting (23.5%) show high alarm.
- Between 19.5 and highest inert alarm (low alarm) we will have alarm indication with the sequence like a High/high alarm for a gas reading.

Alarm if Catalytic sensor installed:

- The firmware not accept Inert mode – CAT sensors does not work without Oxygen

Alarms:

- Low low = Inert warning above example 4% but less than 8% (indicated as high alarm sequency)
- Low = Inert Alarm = reading above example 8% (indicated as high/high alarm sequency)





Models & Pricing

SST4 Diffusion



SST4 Diffusion: 4 Gas Monitor

Yellow is standard

Part Number	Description	LEL Technology	USD
SST4-MICRO-X10MH-Y	WatchGas SST4 Micro LPC/O ₂ /CO/H ₂ S (filtered LEL Sensor)	Low Power Cat Bead	680
SST4-MICRO-X10SH-Y	WatchGas SST4 Micro LPC/O ₂ /SO ₂ /H ₂ S (filtered LEL Sensor)	Low Power Cat Bead	735
SST4-MINI-X20MH-Y	WatchGas SST4 Mini LEL CAT/O ₂ /CO/H ₂ S (unfiltered LEL sensor)	CAT Bead	720
SST4-MINI-X20SH-Y	WatchGas SST4 Mini LEL CAT/O ₂ /SO ₂ /H ₂ S (unfiltered LEL sensor)	CAT Bead	775
SST4-MINI-X30MH-Y	WatchGas SST4 Mini LEL NDIR/O ₂ /CO/H ₂ S (No H ₂ or C ₂ H ₂)	Non-Dispersive IR	820
SST4-MINI-X30SH-Y	WatchGas SST4 Mini LEL NDIR/O ₂ /SO ₂ /H ₂ S (No H ₂ or C ₂ H ₂)	Non-Dispersive IR	875

SST4 Diffusion 2 Gas Monitor

Yellow is standard

Part Number	Description	LEL Technology	USD
SST4-MICRO-X10DD-Y	WatchGas SST4 Micro 2 Gas LPC/O ₂ /DUMMY/DUMMY (filtered LEL Sensor)*	Low Power Cat Bead	500
SST4-MINI-X20DD-Y	WatchGas SST4 Mini 2 Gas LEL CAT/O ₂ /DUMMY/DUMMY (unfiltered LEL sensor)*	CAT Bead	540
SST4-MINI-X30DD-Y	WatchGas SST4 Mini 2 Gas LEL NDIR/O ₂ /DUMMY/DUMMY (no H ₂ or C ₂ H ₂)*	Non-Dispersive IR	640

SST4 Diffusion 3 Gas Monitor

Yellow is standard

Part Number	Description	LEL Technology	USD
SST4-MICRO-X10MD-Y	WatchGas SST4 Micro 3 Gas LPC/O ₂ /CO/DUMMY (filtered LEL Sensor)*	Low Power Cat Bead	578
SST4-MICRO-X10SD-Y	WatchGas SST4 Micro 3 Gas LPC/O ₂ /SO ₂ /DUMMY (filtered LEL Sensor)*	Low Power Cat Bead	624
SST4-MICRO-X10DH-Y	WatchGas SST4 Micro 3 Gas LPC/O ₂ /DUMMY/H ₂ S (filtered LEL Sensor)*	Low Power Cat Bead	578
SST4-MINI-X20MD-Y	WatchGas SST4 Mini 3 Gas LEL CAT/O ₂ /CO/DUMMY (unfiltered LEL sensor)*	CAT Bead	612
SST4-MINI-X20SD-Y	WatchGas SST4 Mini 3 Gas LEL CAT/O ₂ /SO ₂ /DUMMY (unfiltered LEL sensor)*	CAT Bead	658
SST4-MINI-X20DH-Y	WatchGas SST4 Mini 3 Gas LEL CAT/O ₂ /DUMMY/H ₂ S (unfiltered LEL sensor)*	CAT Bead	612
SST4-MINI-X30MD-Y	WatchGas SST4 Mini 3 Gas LEL NDIR/O ₂ /CO/DUMMY (no H ₂ or C ₂ H ₂)*	Non-Dispersive IR	704
SST4-MINI-X30SD-Y	WatchGas SST4 Mini 3 Gas LEL NDIR/O ₂ /SO ₂ /DUMMY (no H ₂ or C ₂ H ₂)*	Non-Dispersive IR	750
SST4-MINI-X30DH-Y	WatchGas SST4 Mini 3 Gas LEL NDIR/O ₂ /DUMMY/H ₂ S (no H ₂ or C ₂ H ₂)*	Non-Dispersive IR	704

SST4 Range

SST4 Micro and Mini

Accessories & Replacement Parts

Part Number	Description	Detail	USD
SST-SPARE-H	WatchGas SST sensor H ₂ S 0-500 ppm for All (Hydrogen Sulfide)	0-500 ppm	160
SST-SPARE-M	WatchGas SST sensor CO 0-2000 ppm for All (Carbon Monoxide)	0-2000 ppm	160
SST-SPARE-O	WatchGas SST sensor O ₂ 0-25% vol for All (Oxygen)	0-25% vol	160
SST-SPARE-S	WatchGas SST sensor SO ₂ 0-100 ppm for All (Sulfur Dioxide)	0-100 ppm	180
SST-SPARE-X1	WatchGas SST sensor LPC LEL for SST4 Micro	0-100% LEL	160
SST-SPARE-X2	WatchGas SST sensor HPL LEL CAT for SST4 Mini, Pump	0-100% LEL	175
SST-SPARE-X3	WatchGas SST sensor NDIR LEL for SST4 Mini, Pump	0-100% LEL	250
SST-SPARE-X4	WatchGas SST sensor LPC for SST4 Pump	0-100% LEL	175
SST4-POUL-10	SST4 Lanyard Bar, with screws for Micro, Mini and Pump, Pack of 10	Stainless Steel	120
7189203-10	Lanyard, with breakaway feature, pack of 10		75
SST4-MICRO-XFIL-10	SST4 External Filters for Micro, Pack of 10 (auxiliary)	Filter for fine particulates	120
SST4-MINI-XFIL-10	SST4 External Filters for Mini, Pack of 10 (auxiliary)	Filter for fine particulates	120
SST4-MICRO-CAL-CAP-10	Calibration Cap for Micro pack of 10	Pack of 10	250
SST4-MINI-CALCAP-10	Calibration Cap for Mini pack of 10	Pack of 10	250
SST-AG-10	WatchGas SST Replacement Alligator Clip pack of 10 for ALL with screws		120
460039	Aluminium Carrying case (for SST4)	Make a kit	53
SST4-MICRO-BOOT	Rubber boot for Micro with extra anchor point, black, with screw driver		33
SST-ScrewDriver	Universal Yellow Screw driver, with locking mechanism	Pack of 1	10

SST4 Range Chargers

Part Number	Description	LEL Technology	USD
Category spares/Acc			
SST-ND-S	WatchGas SST Induction Cradle charger with (SST-RCH) adapter	Single Desk top	75
SST-MULTI	Watchgas SST Range 6 Way USB-C Cable with 25Watt Charger with adapter	Just a Spider	50
SST-DISK-CHR	WatchGas Induction Disk Charger for SST Range with male usb-c cable *	Add charger	10
SST-DISK-CHR-F	WatchGas Induction Disk Charger for SST Range with female usb-c port	For use with MULTI	10
SST-RCH	WatchGas Charging Adapter with female usb-c connector port, cable and universal mains	Universal plug	7
SST-STACK-CHR	WatchGas SST Range 5 Way Stackable Charging Cradle, max 4 can be coupled w/o CHR	Need PSU	350
SST-5WSSC-CHR	WatchGas PSU Adapter for SST-STACK-CHR can power 4 units	One is good for 4	53
SST-STACK-COU	SST Range Coupling Cable (link to couple charging stacks)	Need 3 for full stack	18
SST-6WSSC-KIT	SST Range 6 way bench top charger with universal adapter	All complete	300

SST4 Pumped



SST4 Pumped 4 gas monitor Yellow is standard

Part Number	Description	LEL Technology	USD
SST4-PUMP-X40MH-Y	WatchGas SST4 Pumped 4 Gas LPC/O ₂ /CO/H ₂ S (filtered LEL Sensor)	Low Power Cat Bead	980
SST4-PUMP-X40SH-Y	WatchGas SST4 Pumped 4 Gas LPC/O ₂ /SO ₂ /H ₂ S (filtered LEL Sensor)	Low Power Cat Bead	1035
SST4-PUMP-X20MH-Y	WatchGas SST4 Pumped 4 Gas LEL CAT/O ₂ /CO/H ₂ S (unfiltered LEL sensor)	CAT Bead	1020
SST4-PUMP-X20SH-Y	WatchGas SST4 Pumped 4 Gas LEL CAT/O ₂ /SO ₂ /H ₂ S (unfiltered LEL sensor)	CAT Bead	1075
SST4-PUMP-X30MH-Y	WatchGas SST4 Pumped 4 Gas LEL NDIR/O ₂ /CO/H ₂ S (No H ₂ or C ₂ H ₂)	Non-Dispersive IR	1100
SST4-PUMP-X30SH-Y	WatchGas SST4 Pumped 4 Gas LEL NDIR/O ₂ /SO ₂ /H ₂ S (No H ₂ or C ₂ H ₂)	Non-Dispersive IR	1175

SST4 Pumped 2 gas monitor Yellow is standard

Part Number	Description	LEL Technology	USD
SST4-PUMP-X40DD-Y	WatchGas SST4 Pumped 2 Gas LPC/O ₂ /DUM/DUM (filtered LEL Sensor)*	Low Power Cat Bead	800
SST4-PUMP-X20DD-Y	WatchGas SST4 Pumped 2 Gas LEL CAT/O ₂ /DUM/DUM (unfiltered LEL sensor)*	CAT Bead	840
SST4-PUMP-X30DD-Y	WatchGas SST4 Pumped 2 Gas LEL NDIR/O ₂ /DUM/DUM (No H ₂ or C ₂ H ₂)*	Non-Dispersive IR	920

SST4 Pumped 3 gas monitor Yellow is standard

Part Number	Description	LEL Technology	USD
SST4-PUMP-X40MD-Y	WatchGas SST4 Pumped 3 Gas LPC/O ₂ /CO/DUMMY (filtered LEL Sensor)*	Low Power Cat Bead	878
SST4-PUMP-X40SD-Y	WatchGas SST4 Pumped 3 Gas LPC/O ₂ /SO ₂ /DUMMY (filtered LEL Sensor)*	Low Power Cat Bead	933
SST4-PUMP-X40DH-Y	WatchGas SST4 Pumped 3 Gas LPC/O ₂ /DUMMY/H ₂ S (filtered LEL Sensor)*	Low Power Cat Bead	878
SST4-PUMP-X20MD-Y	WatchGas SST4 Pumped 3 Gas LEL CAT/O ₂ /CO/DUMMY (unfiltered LEL sensor)*	CAT Bead	912
SST4-PUMP-X20SD-Y	WatchGas SST4 Pumped 3 Gas LEL CAT/O ₂ /SO ₂ /DUMMY (unfiltered LEL sensor)*	CAT Bead	967
SST4-PUMP-X20DH-Y	WatchGas SST4 Pumped 3 Gas LEL CAT/O ₂ /DUMMY/H ₂ S (unfiltered LEL sensor)*	CAT Bead	912
SST4-PUMP-X30MD-Y	WatchGas SST4 Pumped 3 Gas LEL NDIR/O ₂ /CO/DUMMY (No H ₂ or C ₂ H ₂)*	Non-Dispersive IR	1046
SST4-PUMP-X30SD-Y	WatchGas SST4 Pumped 3 Gas LEL NDIR/O ₂ /SO ₂ /DUMMY (No H ₂ or C ₂ H ₂)*	Non-Dispersive IR	1121
SST4-PUMP-X30DH-Y	WatchGas SST4 Pumped 3 Gas LEL NDIR/O ₂ /DUMMY/H ₂ S (No H ₂ or C ₂ H ₂)*	Non-Dispersive IR	1196

SST4 Pump

Accessories & Replacement Parts

Part Number	Description	Detail	USD
SST-SPARE-H	WatchGas SST sensor H ₂ S 0-500 ppm for All (Hydrogen Sulfide)	0-500 ppm	160
SST-SPARE-M	WatchGas SST sensor CO 0-2000 ppm for All (Carbon Monoxide)	0-2000 ppm	160
SST-SPARE-O	WatchGas SST sensor O ₂ 0-25% vol. for All (Oxygen)	0-25% vol	160
SST-SPARE-S	WatchGas SST sensor SO ₂ 0-100 ppm for All (Sulfur Dioxide)	0-100 ppm	180
SST-SPARE-X2	WatchGas SST sensor HP LEL CAT for SST4 Mini, Pump	0-100% LEL	175
SST-SPARE-X3	WatchGas SST sensor NDIR LEL for SST4 Mini, Pump	0-100% LEL	250
SST-SPARE-X4	WatchGas SST sensor LPC for SST4 Pump	0-100% LEL	175
SST-AG-10	WatchGas SST Replacement Alligator Clip pack of 10 for ALL with screws	Stainless Steel	120
SST4-POUL-10	SST4 Lanyard Bar, with screws, Pack of 10 (For Micro, Mini and Pump)	Stainless Steel	120
SST4-PUMP-CSE-CASE	SST4 Confined Space ALU case, for 34L gas, DFR Regulator, Unit, Charger, Ball Float and tubing	Empty Case	100
SST4-PUMP-ACC	WatchGas SST4-pump Accessories set for sampling and charging	Accessories Set	60

Probes and Sampling Equipment

Part Number	Description	Detail	USD
008-3015-200	1M Mini Telescopic Sample Probe 20 cm with 3 meters of tubing and built in filter incl luer	Direct Connect	295
008-3015-001	Aluminium Telescopic Probe and Carrying Pouch with PTFE tubing and luer	Direct Connect	262
GSR-07	Alu locking Telescopic Probe up to 4 m, needs sst4-7Sol-reducer-set	Need tube & Luers	406
GSR-02	Carbon Fiber Probe, teflon insert 1 meter, needs sst4-7Sol-reducer-set	Need tube & Luers	234
GSR-04-S-AK	Multifunctional Container Probe w/valve, 1m tubing/luer/tube holder	Direct Connect	292
RVS-G	Stainless Steel Robust Container Probe, needs sst4-7Sol-reducer-set	Need tube & Luers	114
560051	Flexible Mailbox Probe with 0.8 meter of Last-O-More tubing, 3x5 and luer	Direct Connect	38
800-0000-006	Fiberglass telescopic 4 m Rigid Probe w/filter/luer and Last-O-More tubing	Direct Connect	270
7182112	WatchGas Ball Float 5x8 mm, including 3x5 mm reductor needs tubing	Need tube & Luers	30
411-0018-038	Last-O-More Tubing 3x5 mm per meter		16
411-0018-039	Last-O-More Tubing 5x8 mm per meter		22
008-3022-010	Water-trap Filters Small (pack of 10)	0,22 micro meter	43
008-3022-100	Water-trap Filters Small (pack of 100)	0,22 micro meter	248
45518-06	Male Luer 5/32" (5mm x 8mm) (pack of 25)	large barb	37
LAX26-PPO-25	Male Luer 1/8" (3mm x 5mm) (pack of 25)	small barb	33
7189201	Aspirator bulb/pump with flow control for diffusion models with 3 meters of tubing	For diffusion	99
GFP-10	Motorized rechargeable ATEX pump (3x5mm tubing and SST4-7Sol-REDUCER-SET needed)	Need tube and luers	368
SST4-7SOL-Reducer-set	10 cm 5x8 Last-O-More, reductor 1 meter 3x5 last-o-more tubing, male luer	Calibration set	21

Title?



Title?

Part Number	Description	Detail	USD
SST-DOCK	WatchGas SST Docking Station for SST1/SST4/SST4 Pumped Touch screen	Dock complete	3150
SST-DOCK-KIT	WatchGas SST Docking Station for SST1/SST4/SST4 Pumped in Hard Case with Space for 2 Gas Cylinders and DFR	No gas	3750
SST-DOCK-Nanuk	Nanuk Hard Case with Space for 2 Gas Cylinders and DFR with precut foam	Empty case	600
SST-DOCK-ALU	WatchGAS ALU case for dock, with Space for 2 Gas Cylinders and DFR, on board charging plug	Empty case	181

Part Number	Description	USD
SST-KIOSK	WatchGas SST Kiosk for assigning, compliance check and tracking your SST Range	1950

Part Number	Description	USD
SST-Software	WatchGas SST RTR Web Reporting Software (Speak to your Sales Rep for a free Demo) *	3985
SST-Software-R	Recurring license fee (Ask your Sales Rep) *	1995
SST-Software-OP	WatchGas SST RTR on premises Reporting Software *	20000
SST-Software-RS	WatchGas SST RTR on premises Reporting Software yearly fee (Remote support) *	4000
SST-APP	SST Range App for Android and IOS can Bbe found at www.WatchGas.com	FOC

Title?

Part Number	Description	Detail	USD
A0299024	Fixed flow Regulator stainless Steel 715 0.5LPM needs SST4-7SOL-Reducer-set	For all	263
A0195339	Fixed flow Regulator 715 0.5LPM (Brass) needs SST4-7SOL-Reducer-set	Non reactive gas	158
A0299022	Fixed flow Regulator Stainless Steel 715 1LPM needs SST4-7SOL-Reducer-set	For future models	263
A0195371	Fixed flow Regulator 715 1LPM (Brass) needs SST4-7SOL-Reducer-set	For future models	158
A0185107	Demand Flow Regulator Stainless Steel 2004 0-3LPM needs SST4-7SOL-Reducer-set	For all	521
A0177444	Demand Flow Regulator 2004 0-3LPM (Brass) needs SST4-7SOL-Reducer-set	Non reactive gas	353
SST-DFRPSV	WatchGas SST-Dock D.F. Regulator w/Pressure Sensor needs SST4-7SOL-Reducer-set	Gauges gas	390
7177206	Watchgas carrying bag for 3 cylinders	Canvas	89
7177216	Watchgas Carrying bag for 4 cylinders	Canvas	94
7189189	WatchGas single Bottle holder wall mount	Aluminum	63
7189190	WatchGas Tabletop bottle holder for 6 bottles	Aluminum	134
C002613	Carrying Case 574 for 2AL, 8AL cylinders 2 bottles	Plastic Blue	95
SST-NFC-010	Gas Bottle NFC Stickers for tapping bottle data to DOCK or APP	Programming needed	25

Q&A

Thank you!