

SST RANGE™ 

watchgas[®]
detection 



SST4
The *new* standard
in gas detection

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At WatchGas, we watch gas where you can't. Founded in 2018 in Rotterdam, the Netherlands, we design and manufacture gas detection devices that help people work safely in industries around the world. Our mission is clear: build reliable products, share our knowledge of gas detection, and always keep customers at the center of what we do.

From the start, our focus has been on developing practical solutions that address real challenges in the field. Our Product Development team in Rotterdam brings together experience and technical expertise to design devices that are robust, accurate, and simple to use. Each year, we expand our product range, whether through new product introductions or updates that support emerging applications such as hydrogen or fumigation.

Growth through design is central to how we work. By listening closely to customers and partners, we ensure our portfolio evolves with their needs. This approach has led to the development of the SST Range™, including the SST1, SST4 Micro, Mini and Pump, which respond directly to the five key requirements we heard from the market: fast detection, clear displays, durable construction, strong alarms, and a reliable ecosystem of software and docking stations.

Today, WatchGas products are used globally across industries where safety cannot be compromised. Our role is simple but essential: we watch gas, so you and your team can return home safely every day.

Sincerely,

WatchGas Team

SST4 Micro is a unique four-gas device that stands out with its ability to detect hydrocarbons using three Solid Polymer sensors (O₂/CO/H₂S/SO₂) and an LPC (Low-Powered Catalytic). It also features built-in NFC and induction charging, ensuring a one-week runtime. Despite its rugged and compact design, this device doesn't compromise on important features like a display and alarm indicators.

SST4 Mini is versatile, similar to the slightly smaller SST4 Micro. It offers an optional NDIR or traditional high-powered catalytic bead as the detection method for LEL, which is essential in some applications.

SST4 Pump is a pumped four-gas device with our in-house designed pump that allows a draw of up to 110 feet or 33 meters. It is ideal for confined space entry or sampling tanks, ship holds, or LPG units, and coupled with our wide range of accessories, it makes sampling easier than ever.



SST4 Micro

SST4-MICRO-X10MH-Y



SST4 Mini

SST4-MINI-X20MH-Y
SST4-MINI-X30MH-Y



SST4 Pump

SST4-PUMP-X20MH-Y
SST4-PUMP-X30MH-Y
SST4-PUMP-X40MH-Y

SST4 *Micro & Mini*

SST4 Mini

107.9 x 62.4 x 26.1 mm
(4.2 x 2.5 x 1.0 in.)
188g (6.6 oz.)



SST4 Micro

103.9 x 62.4 x 26.1 mm
(4.1 x 2.4 x 1.0 in.)
184g (6.5 oz.)

Using the latest sensor technology, the SST4 Range is designed for the harshest environments while being rugged and easy to use and wear. With its wide range of sensor libraries, the SST4 can be configured to fit various uses and applications. With Tap Compliance and the SST Dock, managing a fleet of devices has never been easier.

The SST4 Mini offers an optional NDIR or traditional high-powered catalytic bead as the detection method for LEL, which is essential in some applications.



NFC – allows for configuration, downloading of data, and assignment of devices;



Charging – using induction charging, the SST4 has removed damage to connections;



Runtime – longer runtimes: 48hr with LPC and 200hr with NDIR;



Sensors – Solid Polymer Technology with the best-in-class performance with temp /humidity. The best response time on the market. Flexibility of sensors - CO, H₂S, SO₂ and O₂, ideal for a wide range of applications;



Configurable – depending on customers' requirements the device can be tailored;



One button operation – simple user interface and easy to use with a gloved hand;

SST4 Pump

Confined spaces can be challenging, not only due to high temperatures, chemicals, and dirt but also because of the time needed to obtain a permit to work. Slow sampling and pump issues in harsh environments often add delays.

The SST4 Pump is built to speed up this process with NFC data transfer for faster permit approvals. Designed for tough conditions, it features a 95 dB alarm at 30 cm, rugged housing, up to 33 meters of sampling, and practical accessories that make confined space work safer and quicker.

 **Screen bumpers** – protects screen from scratching due to smaller sensor profile;

 **Rugged** – double shot moulding, IP65/68, and toughened housing;

 **Screen** – larger screen than the next best alternative and backlight gives clear viewing;

 **Response time** – fastest T90 response time in its category.

SST4 Pump additional features:

 **Pump** – inhouse designed pump for 110 feet / 33 meters sample draw;

 **Membrane pump** – giving excellent robustness and quality of draw.

 **Inert mode** – for sampling in gas enriched environments such as ducts and pipes.

SST4 Pump

150 x 62.2 x 32.4 mm

(5.9x 2.4 x 1.3 in.)

275g (9,7 oz.)



LEL Sensor Types

SST4 Micro

LPC

SST4 Mini

NDIR, HPC

SST4 Pump

LPC, NDIR, HPC

Sensor advantages

Sensor disadvantages



LPC

- fast response time for light Hydrocarbons
- not impacted by shock through impact
- cost-effective; ideal for compliance market
- low power consumption

- will not see heavy hydrocarbons, nonanes etc
- silicone poisoning over time when filter becomes saturated



HPC

- sees heavy hydrocarbons like nonanes / methanals

- lower battery runtime due to super high power
- beads impacted by dropping and could become damaged
- silicone poisoning



NDIR

- 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

- cannot detect H₂
- not a linear signal, so over-measure on heavier HC
- technology is not the cheapest but lifetime and runtime compensate for the cost

Solid Polymer Electrochemical Gas Sensor

A new standard in gas detection

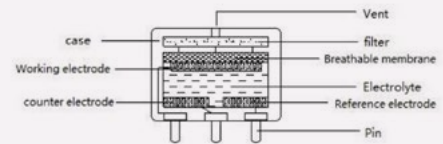
For over 40 years, most electrochemical gas sensors relied on liquid electrolytes. These can leak, dry out, or require larger housings to compensate for environmental conditions. At WatchGas, we've developed a solid polymer electrolyte (SPE) sensor, a dry-cell design that removes these limitations.

Why WatchGas SPE sensors?

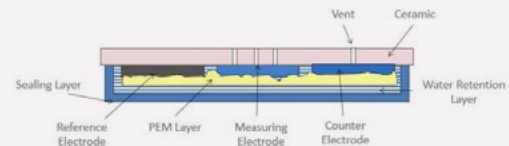
- **Leak-free design:** no liquid reservoir, no risk of drying out or leakage.
- **Compact & efficient:** smaller size, lower power consumption, and consistent performance.
- **Durable:** works in both humid and dry conditions, where liquid-based sensors often fail.
- **Cost-effective quality:** advanced automated production ensures high volumes at stable quality and price.
- **Proven versatility:** ideal for both portable and stationary applications, detecting gases like CO, NH₃, NO₂, SO₂, O₂, H₂S, and more.

Revolutionary benefits

With Solid Polymer Electrochemical Technology, WatchGas redefines what's possible in gas detection. Our sensors combine high selectivity, energy efficiency, and flexible design to meet today's toughest safety demands.



The old Liquid Electrochemical Gas Sensor



SPE (Solid Polymer Electrochemical) Gas Sensor

SST range features

Every SST device includes a set of core features that simplify compliance, improve traceability, and extend device lifetime. These functions are standard across the range, ensuring consistency and reliability no matter which model you choose.



Scan protect

Allows the user to set a password so the unit cannot be scanned by unauthorized device link;



Bump and calibration

Reminders can be set, and this can be easily done through the WatchGas App or through the SST Dock or SST Kiosk. After bumping and calibration with the dock or app, certificates are stored in the WatchGas Application for easy sharing and site auditing;



Tap compliance

Allows the user to confirm unit functionality and transfer any events and health data in to the WatchGas Compliance Watch Software;



Compliance indicator

A led that will show the status of the device. Green light indicates good health of the device and no actions required;



Event logs

Are captured in the device and up to 100 events are stored at a device level. Any time the device is docked into the SST Dock or Kiosk the information is downloaded;



Peak alarm storage

For review later or if needed in an incident report;



95db alarm

For a clear warning signal in every environment;



TWA and STEL

Can be set in the SST1 serviceable devices and all SST4's, and this can be reset with a 10 second button press. This is ideal for shift changes;



Hibernation mode

Is easy and can be done via the WatchGas Application or via the SST Dock or SST Kiosk. This allows for longer use of the device and saves battery life for later use;



Maintenance overview

Can be viewed via the WatchGas Application or via the Compliance Watch Software and shows the health of your fleet allowing for a proactive service schedule;



Assign and unassign users

Fast and easily with the WatchGas Application or via the SST Kiosk. This allows for full fleet traceability, ideal for shutdowns or rental fleets;



One button operation

Simple user interface and easy to use with a gloved hand;



Easy configuration via WatchGas application

No need for wires or setting up PC, now it is easily done via NFC and phone, kiosk or docking station.

SST RANGE™



SST1

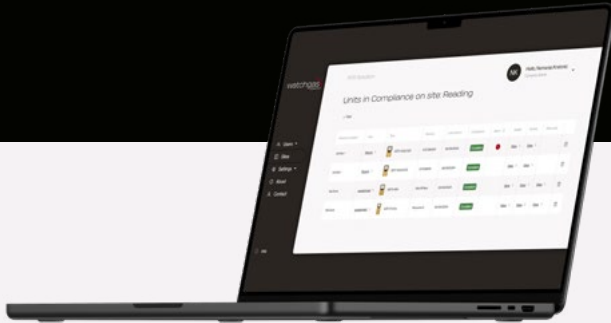
SST4 Mini

SST4 Micro

SST4 Pump

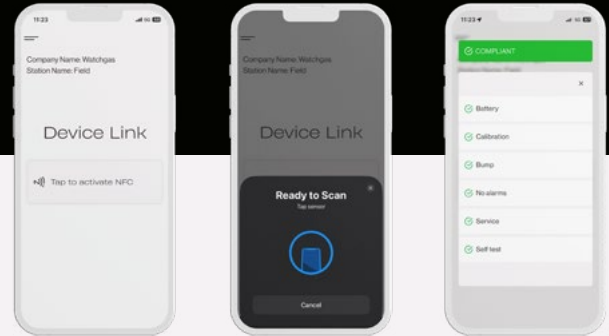


SST Ecosystem



WatchGas SST RTR Web Reporting Software

The WatchGas RTR Software simplifies fleet management by turning complex data into actionable insights. Gain instant visibility on compliance, fleet health, and user traceability across multiple sites. With proactive monitoring, smart reporting, and alert notifications, RTR reduces downtime and costs while improving safety. Combined with the SST Dock and SST Kiosk, it ensures seamless integration for maintenance, compliance, and optimized fleet management.



WatchGas SST Application

The WatchGas SST Application makes complex tasks simple and fast. With NFC, you can configure devices without PCs or cables, adjusting alarm set points, enabling features or updating remotely. The app delivers full fleet traceability through Tap Compliance and shows device health with an easy star rating, helping service centers and safety managers stay in control. Event logs can be downloaded on-site and shared instantly via SMS, email or WhatsApp, cutting out unnecessary trips. Fully compatible with the SST Range™, it removes the need for multiple software platforms for single- and multi-gas devices.



WatchGas SST Dock

SST Dock streamlines gas detector maintenance by allowing multiple devices and cylinders to be tested and calibrated in one go: saving time, cutting costs, and boosting productivity. It automatically logs test results, calibration history, gas levels, and expiration dates, making compliance effortless. With remote monitoring, maintenance scheduling, and reporting built in, managing your fleet has never been easier. Standardized, automated calibration ensures reliable, error-free results every time. Investing in SST Dock reinforces your commitment to safety and builds a stronger, more proactive safety culture.



WatchGas SST Compliance Kiosk

The WatchGas Compliance Kiosk gives you instant insight into gas detector status, syncing seamlessly with SST RTR Web Reporting Software for complete fleet oversight. It verifies settings, monitors device health, and reduces downtime with preventive maintenance alerts. With built-in Wi-Fi or cellular connectivity, it makes data sharing effortless, whether to a laptop, phone, or printer. Users get real-time prompts for required actions, and credentials are auto-loaded if missing. Event logs are downloaded automatically, giving safety managers quick access to critical data. Wall-mounted or desktop-ready, it's built for flexibility.

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