watchgas
detection

SST1
Single Gas
SERVICEABLE WITH IOELV, STEL & TWA

(H₂S) (CO) (O₂) (SO₂) (CH₄S) (PH₃) (NH₃) (H₂)

RTR COMPATIBLE

Applications

- Oil and gas upstream
- Oil and gas downstream
- Contractors
- Site maintenance
- Turnarounds and shutdowns
- Boiler rooms
- Steel plants
- Laboratories
- Shipping
- Power generation
- Mining

Features and benefits

Easy Setup
With NFC built in as standard, the SST1 unlocks a wide range of possibilities tailored to your needs. Simply pair the device with the WatchGas App to manage your fleet, perform bump tests, calibrate, assign devices, or download event logs. For more details, see the Tap&Go application note highlighting the full benefits of NFC.

Sensor
Using the latest in Solid State Technology our H_2S, CO, O_2 and SO_2 offer stability and reliability over extreme temperatures and conditions. With its smaller form factor and the removal of traditional electrolyte allows for a new standard in the single gas market.

IOELV
The SST1 is the only product in its category that delivers seamless access to critical data via NFC Tap & Go. Instant extraction of IOELV values, alarm events, and device status provides safety managers with a complete overview of exposure levels, enabling proactive safety measures and helping to reduce business interruptions.

Rugged
Designed with the harshest environments in mind the SST1 offers an Ingress Protection rating of IP67/68. The casing is a double shot housing that gives extra robustness while not compromising on quality. The screen protectors located on either side of the display are designed to protect the LCD from scratching and are required due to the smaller sensor profile.

Alert
As a safety device it is essential that the device clearly notifies users of the presence of gas. The SST1 has a 95dB alarm audible at 30 centimeters which is the industry standard and is required in loud industrial environments. With the largest display in the category and high and low alarms, SST1 provides best-in-class early warnings.

Serviceable
The SST1 serviceable is a cost-efficient solution for users with IOELV, STEL, and TWA requirements. SST1 real-time allows users to replace the battery and sensors to maximize the lifetime of the unit. Press and hold the button for 10 seconds to reset the TWA/STEL for a worker shift change.

The SST1 Serviceable offers one of the most cost-effective solutions on the market. With its replaceable battery and solid polymer sensor technology, the SST1 provides a compact and modular design without compromising on ruggedness. The SST1 Serviceable can be configured to your needs with a simple tap of the NFC to pair it with the WatchGas SST App. The SST1 monitors Low, High, STEL, and TWA levels, indicating both immediate risks and long-term exposure to toxic gases.

Configurable options:
- Configuration of high and low alarm set points using SST-Dock or the WatchGas App
- Real-time gas reading, TWA and STEL alarms
- User-settable bump test and calibration reminder
- Compliance check

SST1 Serviceable Specifications

Size	83 x 49 x 20 mm (3.3 x 1.9 x 0.8 in)
Weight	88g (3.1oz)
Operating temperature	CO, H₂S, O₂, SO₂: -40 ~ +60 °C (-40 ~ +140 °F) Others: -20 ~ +50 °C (-4 ~ +122 °F)
Humidity	5 ~ 95% r.h.
Response time T90	H₂S, CO, O₂, PH₃, H₂ Low Range: < 10 sec. CH₄S: < 40 sec. SO₂, H₂ High Range: < 55 sec. NH₃: < 130 sec Other sensors may vary
Battery life	O₂: 2 years* H₂S, CO, SO₂, NH₃, H₂, PH₃, CH₂S: up to 3 years* * = dependent on gas alarms
Event logging	Last 100 events
IP	65/68
Communication	NFC
Shelf life	1 year
Certifications and approvals	ATEX, IECEX, UKEX : II 1 G Ex ia IIC T4 Ga I M1 Ex ia I Ma
	North America: Int.Safe: Cl I Dv 1, Gr A,B,C,D T4 CSA C22.2 NO. 60079-0 CAN/CSA C22.2 NO 60079 UL 61010 UL60079-0, UL60079-11 CAN/CSA-C22.2 NO 6101-1-12
	EMC Directive 2014/30/EU
	(PESO) Ex ia IIC T4 Ga
	(Korea) Ex ia IIC T4
	(Brazil) Ex ia I Ma Ex ia IIC T4 Ga
	(ABS) 24-00T2542343-1-PDA
Warranty	Instrument: 3 years Battery: 2 years (based on 2 min of alarm per day) Sensors: NH₃, CH₄S, PH₃: 1 year H₂S, CO, O₂, SO₂, H₂ Low and High Range: 2 years

Note: Battery lifetime is based on low power mode, depending on usage and functions they may be reduced.

Sensor Specifications

Sensor	Gas measuring range	Low alarm level	High alarm level	STEL	TWA	Resolution
H₂S	0 - 500 ppm	10 ppm	15 ppm	15 ppm	10 ppm	0.1 ppm
CO	0 - 2000 ppm	35 ppm	200 ppm	100 ppm	20 ppm	1 ppm
O₂	0 - 25.0% Vol	19.5% Vol	23.5% Vol	-	-	0.1% Vol
SO₂	0 - 100 ppm	5 ppm	10 ppm	5 ppm	2 ppm	0.1 ppm
NH₃	0 - 100 ppm	25 ppm	50 ppm	35 ppm	25 ppm	0.1 ppm
H₂ Low Range	0 - 1000 ppm	100 ppm	400 ppm	-	-	1 ppm
H₂ High Range	0 - 20,000 ppm	4000 ppm	8000 ppm	-	-	100 ppm
CH₄S	0 - 100 ppm	2 ppm	5 ppm	1 ppm	0.5 ppm	0.1 ppm
PH₃	0 - 20 ppm	1 ppm	2 ppm	1 ppm	0.3 ppm	0.01 ppm

All alarm levels can be set using the WatchGas App or SST Dock

Accessories

Gas Cylinder

(Ask for bottle size and concentration)

Fixed Flow Regulator 715
0.5 LPM Stainless Steel
A0299024
0.5 LPM Brass
A0195339

WatchGas SST1 External Filters
Pack of 10
SST1-XF-10
Pack of 100
SST1-XF-100

WatchGas SST Docking Station
Touchscreen - For SST1, SST4 and SST5
SST-DOCK

WatchGas RTR Web Reporting Software

SST-SOFTWARE

For more information

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