



SST5

FIVE-GAS DETECTOR



RTR COMPATIBLE

Applications

- Oil and gas upstream
- Steel production
- Wastewater
- Ship building
- First responders
- Manufacturing
- Shipping
- Power generation

Features and Benefits



NFC

Near Field Communication built in as standard and allows for a wide range of solutions depending on your needs. Simply pair SST5 with the WatchGas Device Link App to manage your fleet, bump, calibrate, assign, or download event logs. See Tap & Go application note for more information on the benefits of NFC and what it can do for you.



Rugged

Designed with the harshest environments in mind the SST5 offers an IP rating of 65/68. The casing is a double shot housing that gives extra robustness whilst not compromising on quality. The screen protectors located either side of the display are to protect the LCD from scratching and is required due to the smaller sensor profile.



Alert

As a safety device, the SST5 ensures users are immediately and clearly notified of the presence of gas. It features one of the loudest alarms in its category, delivering a powerful 95 dB at 30 cm, making it highly audible even in the noisiest industrial environments. High, Low, STEL and TWA alarms can be configured by the user and are automatically updated directly on the device or through the SST Dock or WatchGas Device Link App, providing reliable, customizable, and highly effective protection at all times.



Display

With a great screen-to-product size ratio and one of the largest screens in its category, the SST5 display ensures information is displayed clearly and allows users to make quick decisions. Up to five gases can be shown simultaneously, toxic in mg/m³ or PPM and explosive in %LEL or %VOL. Correction factors can be set through the WatchGas Device Link App, allowing a one-to-one reading for the target gas required. The backlight enables use in dark environments and automatically illuminates during an alarm event.



Sensor

Using the latest micro sensor technology for H₂S, CO, O₂, SO₂ and traditional electrochemical sensors for exotic gases. The SST5 offers 2 HCN types (filtered and unfiltered), as well as an Xs broadband sensor for general application, and for a 5th target gases.



Innovation

In dirty and harsh environments that gas detectors are often used in many charging connectors become damaged. SST5 has been designed with induction charging allowing for simple and quick charging with no risk of cables and ports becoming damaged and failing.

The SST5 is one of the smallest and lightest 5-gas monitors on the market, easily worn in the breathing zone. It is typically around 40% smaller and 25% lighter than other 5-gas diffusion portable detectors, offering exceptional comfort and flexibility for users. Despite its compact size, the rugged SST5 is built to perform in a wide range of environments, from the high temperatures of the steel industry to the challenging conditions faced by Hazmat teams or the extreme environments of the Oil and Gas sector. With a broad range of configurable options, the SST5 can be tailored to suit diverse applications. Simple setup, calibration, and bump test records are easily managed through the WatchGas Device Link App, while compliance checks make it straightforward to maintain your devices and ensure maximum uptime across your fleet.

SST5 SPECIFICATIONS

Size	107.9 x 62.4 x 26.1 mm / 4.2 x 2.4 x 1.0 in	
Weight	188 g / 6.6 oz.	
Temperature	H ₂ S, CO, O ₂ & SO ₂ : -40 ~ +60 °C / -40 ~ +140 °F Others: -20 to +50°C / -4 to +122°F LEL: -40 to +60°C / -40 to +140°F	
Humidity	5 ~ 95% r.h. (non-condensing)	
Typical battery life	SST5 LEL LPC (Low Power Catalytic) - 48hr SST5 LEL NDIR (Non Dispersive Infrared) - 200hr	
Induction charger	2 to 3 hours	
Event logging	100 events	
Data logging	6 months	
IP	65/68	
Communication	NFC	
Calibration	6 month as standard	
Certifications and approvals		ATEX, IECEX, UKEX : LEL-LPC II 1 G Ex ia IIC T4 Ga, I M1 Ex ia I Ma LEL-IR II 1 G Ex ia op is IIC T4 Ga, I M1 Ex ia op is I Ma
		North America: (non-IR) Class I Division 1 Group A,B,C,D T4 U.S. Canada Class I Zone 0 AEx ia IIC Ex ia IIC T4 Ga T4 Ga
		North America: (IR) Class I Division 1 Group A,B,C,D T4 U.S. Canada Class I Zone 0 AEx ia op is Ex ia op is IIC T4 Ga IIC T4 Ga
		EMC Directive 2014/30/EU
		(PESO) Ex ia IIC T4 Ga Ex ia op is IIC T4 Ga (with IR sensor)
		(Korea) Ex ia IIC T4 Ex ia op is IIC T4 (with IR Sensor)
		Ex ia I Ma, Ex ia IIC T4 Ga Ex ia op is I Ma, Ex ia op is IIC T4 Ga (with IR sensor)
		(ABS Type Approved) 24-00T2542343-1-PDA
Warranty	Instrument and O ₂ , LEL, CO, H ₂ S, SO ₂ Sensors: 2 years Other sensors: 1 year	

SENSOR SPECIFICATIONS


Sensor type	Gas measuring range	Low alarm	High alarm	STEL	TWA	Resolution
Micro Sensors						
H ₂ S	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
O ₂	0 - 30% Vol.	19.5% Vol.	23.5% Vol.	N/A	N/A	0.1% Vol.
SO ₂	0 - 100 ppm	5 ppm	10 ppm	5 ppm	2 ppm	0.1 ppm
Mini Sensors						
Cl ₂	0 - 50 ppm	0.5 ppm	1 ppm	1 ppm	0.5 ppm	0.1 ppm
ETO	0 - 100 ppm	5 ppm	10 ppm	10 ppm	5 ppm	0.1 ppm
HCN (unfiltered)	0 - 50 ppm	5 ppm	10 ppm	4 ppm	4 ppm	0.1 ppm
HCN F*	0 - 50 ppm	5 ppm	10 ppm	4 ppm	4 ppm	0.1 ppm
NH ₃	0 - 100 ppm	25 ppm	50 ppm	35 ppm	25 ppm	0.1 ppm
NO	0 - 100 ppm	25 ppm	50 ppm	50 ppm	25 ppm	0.1 ppm
NO ₂	0 - 20 ppm	2 ppm	5 ppm	5 ppm	3 ppm	0.1 ppm
SO ₂	0 - 40 ppm	5 ppm	10 ppm	5 ppm	2 ppm	0.1 ppm
Xs**	0 - 100 ppm	25 ppm	50 ppm	50 ppm	25 ppm	0.1 ppm
LEL Sensors						
LPC	0 - 100% LEL	10%	20%	N/A	N/A	1% LEL
NDIR	0 - 100% LEL	10%	20%	N/A	N/A	1% LEL

All alarm levels can be set using the WatchGas Device Link App or SST Dock.
*Hydrogen Cyanide sensor with an integrated H₂S filter to eliminate cross interference.
** High-stability broad-band sensor for certain organic gases and vapors.


Accessories




Universal Cradle Charger for SST Range
SST-IND-S



WatchGas SST Range 5-Way Stackable Charging Cradle
SST-STACK-CHR



SST Dock
SST-DOCK



WatchGas SST RTR Web Reporting Software
SST-SOFTWARE

Distributed by:

For more information

www.watchgas.com / www.watchgasusa.com
info@watchgas.com / info@watchgasusa.com

WatchGas SST5 DS EN V2.1 E7F © 2026 WatchGas B.V.

WatchGas is dedicated to continuously improving its products. Therefore, the specifications and features mentioned in this datasheet are subject to change without prior notice.