

Schützen SP-MGTVOC

VOC Gas Detections



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The Schützen SP-MGTVOC gas detector is highly regarded for marine applications, offering reliable performance in VOC environments and cargo monitoring while meeting IMO regulation XI/1/7.

VOC Detection in Marine Industry

VOC (Volatile Organic Compounds) detection in the marine industry is crucial for several reasons, including environmental protection, worker safety, and regulatory compliance. VOCs are emitted from fuels, oils, paints, and other chemicals commonly used on ships, in ports, and during the maintenance of vessels. Detecting and managing VOCs effectively helps mitigate their harmful effects.

Sources of VOCs

Fuel and Engine Emissions: VOCs are present in exhaust gases from ships' engines and fuel systems, especially from diesel engines.

Cargo Handling: VOCs are released during the loading and unloading of volatile cargo, especially in the case of petroleum or chemical tankers.

Maintenance and Coatings: VOCs are also released during the application of paints, coatings, and other chemicals used for vessel maintenance.

Waste Treatment: VOCs can be emitted from waste treatment systems on board, including those that handle sewage and bilge water.



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Key Features

Sampling type with embedded pump & Probe

Event log (Recent 30 event / bump / calibration)

Easy to maintain (2 filters in probe & in detector)

Inner Teflon coating of gas tube line

IrDA communication

Single Docking Station



Other Accessories



IR LINK



CALIBRATION /
CERTIFICATION STATION

Specifications & Ordering Information

PART NO	PRODUCT
Schützen	
AAA104142	Schützen SP-MGTVOC 1 O2, CO/H2S, CH4(Catalytic), PID
AAA104144	Schützen SP-MGTVOC 2 O2, CO/H2S, CH4(IR), PID
AAA104146	Schützen SP-MGTVOC 3 O2, CO/H2S, CH4/CO2(IR), PID
Schützen Accessories	
2NDAS0001	Schützen SAMPLING PUMP
2NDAS0002	Schützen EXTENSION PROBE 10M

Monitor Specification	
Physical characteristics	
Size	Size:77mm(W)x146mm(H)x43mm(D)
Weight	490g
Sampling	Built-in pump (Up to 23M)
Flow rate	250~300cc
Carrying attachments	Stainless steel alligator clip
Case material	Shock resistant TPU covered Poly Carbonate (PC) absorption
Environmental protection	IP 67 (third party certified)
Display	Digital LCD display, LCD Backlight, LED Indicator
Display info	Live Reading, remaining battery life
Monitoring	
Sensor ranges/Resolution	CO: 0-500 ppm, H2S: 0-200 ppm, O2: 0-30.0% Vol, Catalytic LEL: 0 ~ 100%, IR LEL: 0 ~ 100%, VOC: 0 ~ 4,000 ppm
Power	
Power source	Rechargeable Li-ion, Nominal Voltage : 3.7V, Nominal Capacity: 4000mAh
Battery life indication	Yes
Battery	TANK1: 72 hours TANK2: N Type: 52 Hours (Charging time: 4-6hrs)
Alarms	
Visual alarm	LCD Alarm Display, LCD Backlight
Audible alarm	Indicator LED Audible/ Buzzer (90dB at 10cm)
Vibrating alarm	Yes
Alarm set points	Fully customizable
Data storage	
Data logging	Logs last 30 events
Data retention	Yes – IR Link to PC
Data transmission	Infrared
Certifications/Approvals	
IECEX	P0 Ex da ia IIC T4 Ga / Ex da ia IIB T4 Ga 00/N0 Ex ia IIC T4 Ga / Ex ia IIB T4 Ga N1/N2 Ex db ia IIC T4 Gb / Ex db ia IIB T4 Gb
ATEX	PO II 1 G Ex da ia IIC T4 Ga / II 1 G Ex da ia IIB T4 Ga 00/N0 II 1 G Ex ia IIC T4 Ga / II 1 G Ex ia IIB T4 Ga N1/N2 II 2 G Ex db ia IIC T4 Gb / II 2 G Ex db ia IIB T4 Gb
INMETRO	P0 Ex da ia IIC T4 Ga / Ex da ia IIB T4 Ga 00/N0 Ex ia IIC T4 Ga / Ex ia IIB T4 Ga N1/N2 Ex db ia IIC T4 Gb / Ex db ia IIB T4 Gb Ex da ia IIC T4 Ga Ex da ia IIB T4 Ga
UL/CSA	P0 Class I, Division 1, Groups A, B, C, and/or D, T4 Class I, Division 1, Groups C, and/or D, T4 Class I, Zone 0, AEx da ia IIC T4 Ga Class I, Zone 0, AEx da ia IIB T4 Ga Ex ia IIC T4 Ga Ex ia IIB T4 Ga 00/N0 Class I, Division 1, Groups A, B, C, and/or D, T4 Class I, Division 1, Groups C, and/or D, T4 Class I, Zone 0, AEx ia IIC T4 Ga Class I, Zone 0, AEx ia IIB T4 Ga Ex db ia IIC T4 Gb Ex db ia IIB T4 Gb N1/N2 Class I, Division 1, Groups A, B, C, and/or D, T4 Class I, Division 1, Groups C, and/or D, T4 Class I, Zone 1, AEx db ia IIC T4 Gb Class I, Zone 1, AEx db ia IIB T4 Gb
Etc	EMC, RoHS2, REACH, WEEE, FCC, RCM(ACMA&RSM)
Approved temperature ranges	-20°C ~ +50°C
Environment	10%~90%RH(non-condensing)

