

Gas Detection.



# Living Safety by MSR-Electronic

Fixed Gas Detection Systems for  
Buildings, Industry and Marine



# Applications

Comprehensive gas detection solutions.



## Garage, Tunnel, Loading zone

The gases CO, NO<sub>2</sub> and LPG occur in public garages, tunnels or loading zones where many vehicles are in use. In this case the operators rely on gas sensors. If limit values are exceeded, passers-by are warned by the gas detection system and asked to leave the danger zone.

CO / NO<sub>x</sub> / LPG / NH<sub>3</sub> / O<sub>2</sub>

Products: DGC, MSC, MSB, SB, SC-Tox, SC-Ex, WSB



## Food & Beverage

In the areas of refrigeration/industrial refrigeration, cold rooms, refrigerated cabinets for stores, the beverage industry, breweries, wineries, dispensing systems, beverage storage, vending machines, ripening and storage of food and in the packaging industry, hazards can arise due to toxicity, flammability and oxygen displacement.

CO<sub>2</sub> / C<sub>3</sub>H<sub>8</sub> / NH<sub>3</sub> / FKW / HFKW / O<sub>2</sub>

Products: MSC, WSB, SC-Freon, SC-CO<sub>2</sub>, PX, SX-Ex, DGC



## Hydrogen

H<sub>2</sub> is a highly reactive gas, making constant monitoring by a gas warning system mandatory throughout its life cycle. Whether in research, production or transportation. When H<sub>2</sub> is used, leaks can occur at any time, causing catastrophic damage in the event of ignition.

H<sub>2</sub> / NH<sub>3</sub> / O<sub>2</sub>

Products: DGC, PX, SX, SSAX



## Pharma, Laboratory and Research

In the food, pharmaceutical and cosmetics industries organic substances are fermented by adding bacteria, fungi or enzymes in tanks. During this process gases to be detected are produced. Even when handling with gas cylinders, e.g. during experimental work in the laboratory, the environment must be protected from gas hazards.

N<sub>2</sub> / Cl<sub>2</sub> / CO / H<sub>2</sub>S / NH<sub>3</sub> / O<sub>2</sub> / CO<sub>2</sub> / CH<sub>2</sub>O / NO<sub>2</sub> / CH<sub>4</sub> / C<sub>3</sub>H<sub>8</sub>

Products: MSC, DEM, DGC, SC-Tox/-Ex, MC-Tox, MC-Ex



## Industry

In many industrial companies, gases that are hazardous to health and equipment are used in different processes (production, recycling, water treatment). Continuous monitoring of the ambient air for the concentration of toxic gases as well as the oxygen content is an essential part of occupational safety and health protection.

$H_2$  /  $H_2S$  /  $C_3H_6O$  /  $CO_2$  /  $CH_4$

Products: DGC, PX, SX, SSAX



## Buildings

Commercial and public facilities such as schools, swimming pools, hospitals, hotels and shopping centres use integrated safety systems that include gas detection devices. Large numbers of visitors increase the risk of  $CO_2$  accumulation. Heating systems must be monitored for a leakage of flammable gases.

$CL_2$  /  $O_2$  / LPG /  $CH_4$  /  $CO_2$  /  $C_3H_8$

Products: MSC, WSB, MC- $CO_2$ , SC-Tox, SC-Ex, DEM, DGC



## Agriculture

When operating biogas plants, aquaculture/fish farming, in fertiliser production, livestock monitoring as well as in indoor farming or in meat processing, attention must be paid to gas hazards, to recognise explosive and toxic gas mixtures at an early stage and warn against them.

$CH_4$  /  $CO_2$  /  $NH_3$  /  $H_2$  /  $H_2S$  /  $O_2$

Products: DGC, PX, SX, SSAX



## Marine

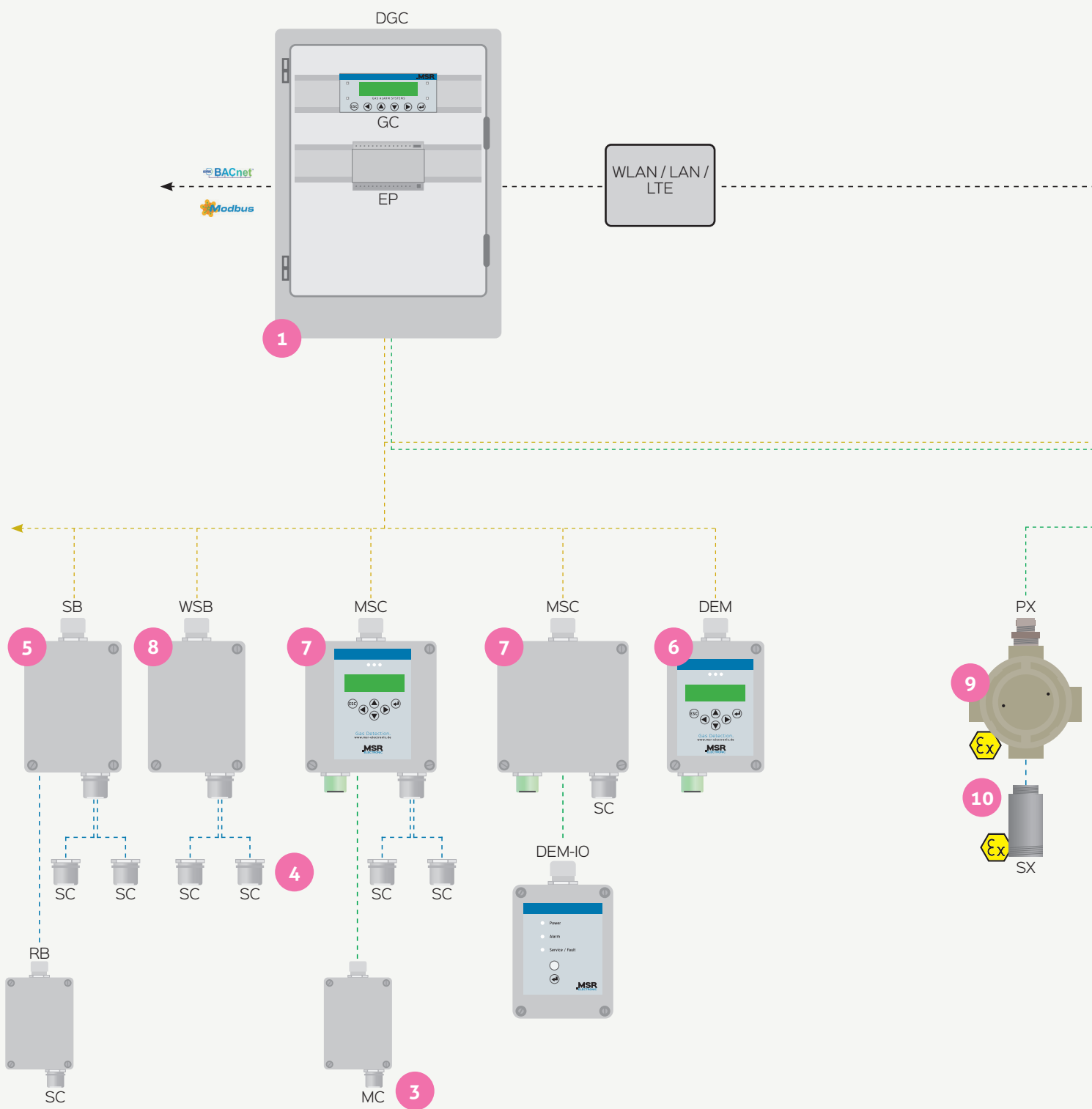
Hazardous substances are transported in the shipping industry and must be monitored with regard to their emissions. In addition, exhaust gases are produced and there is a dependency on various operating materials. These must also be monitored in order to warn the crew of potential hazards in good time.

$CO_2$  /  $NH_3$  /  $CO$  / LPG /  $H_2$  /  $H_2S$  /  $O_2$  /  $CH_4O$

Products: PX, SSAX, SX

# Product series

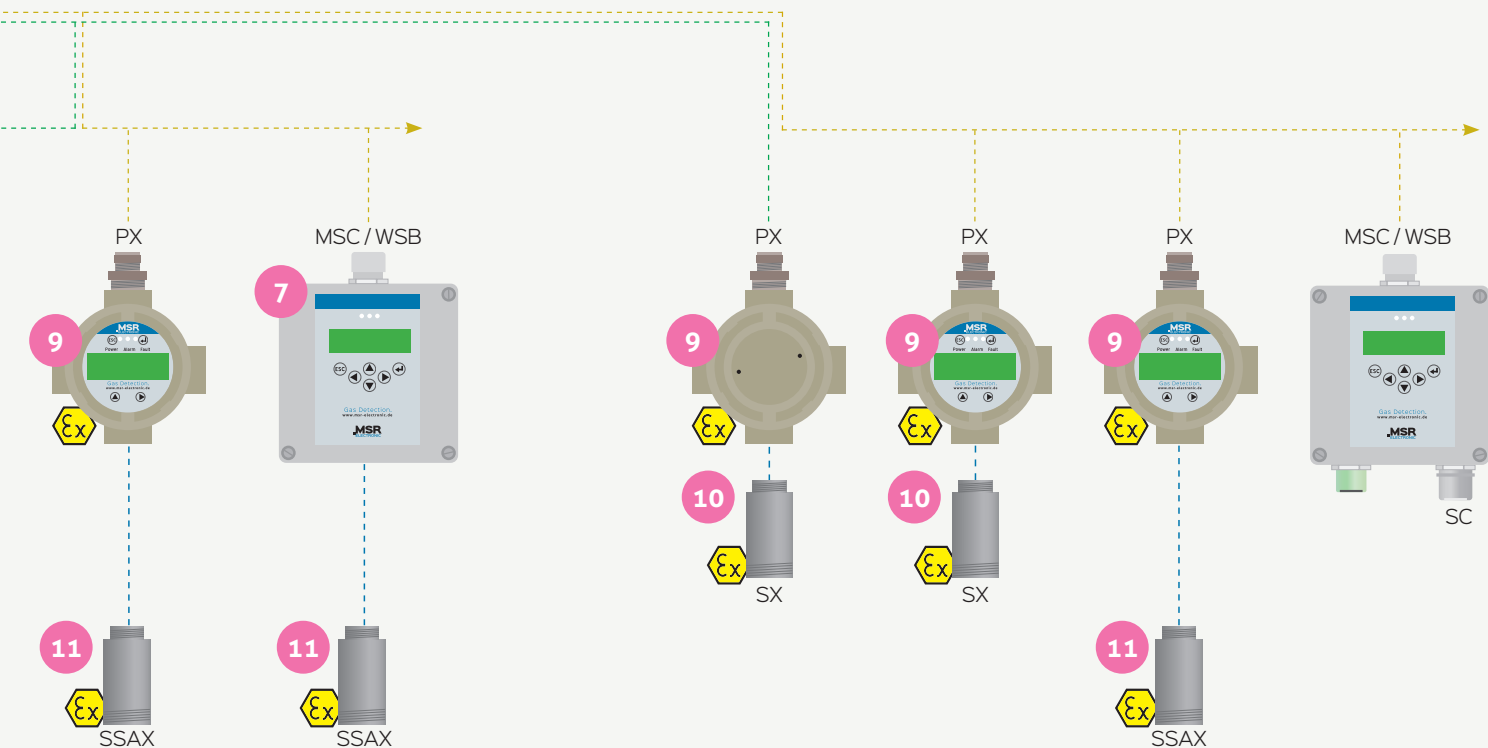
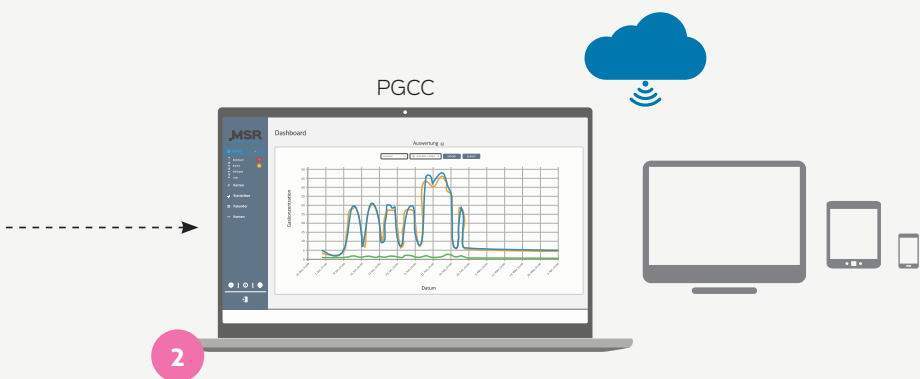
## PolyGard®



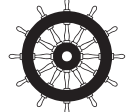


# PolyXeta®

# PolyMarine®



# Certificates



## **MSR CERTIFICATES**

Find out all about certificates and authorisations.

## **MSR ONLINE CATALOG**

Stationary gas warning systems for buildings, industry and marine applications.

## **MSR SHOP**

Benefit from a clear product selection.

## **MSR PRODUCTS**

Find out more in our interactive overview.

# Products



1



## Digital-Gas-Controller DGC

Measuring, warning and controlling device system in different versions. Applicable for large systems for monitoring and evaluation of up to 128 sensors and control of up to 32 relays.

2



## Online Gas Monitoring PGCC

For visualization of measurement data, parameters and statistics, in combination with GC and PG / PX Controller. The MSR cloud solution enables remote access.

3



## Analog Sensor MC

Analog exchangeable sensor with 4-20 mA / 2-10 V output and simple, integrated, digital calibration routine using a tool.

4



## Digital Sensor SC

Digital exchangeable sensor with local bus provides information on calibration interval and lifetime in addition to the measured value. Digital signature of the sensor for a clear assignment with the connected board.

5



## Sensor-Board SB

For the provision of the measured values of up to 3 SC sensors on the GC Controller or superior BMS.

6



## Door-Entrance-Modul DEM

The module in the versions with display or LED enables individual warning at entrances.

7



## Multi-Sensor-Controller MSC

Compact gas detector for connection of up to 3 sensors, 2 of them with the same gases. It has 2 relays, Modbus and an analog output, optional display.

8



## Warning- and Sensor-Board WSB

Compact gas detector for connection of up to 3 sensors, 2 of them with the same gases. It has 2 relays, Modbus and an analog output, optional display.

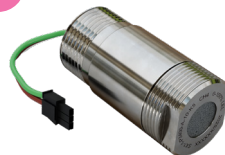
9



## PolyXeta® PX

Gas detector with certification for ATEX, IECEx Zone 1/2, SIL2, MED und DNV. Signal transmission via display, relay, Modbus or analog output.

10



## Digital-Sensor SX

Digital changeover sensor with local bus for use in PX. In addition to the measured value, it provides information on the calibration interval and service life. Certified for ATEX and IECEx Zone 1/2 and SIL2.

11



## Digital Sensor SSAX

Remote sensor for connection to PG boards, for use in ATEX and IECEx Zone 1/2 and SIL2. In addition to the measured value, the probe provides information on calibration interval and lifetime.

## Accessories

Various accessories for calibration, parameterization of MSR products, as well as warning devices for visual and acoustic display of alarms.



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