

Measurement and control technology



## MULTI-CHANNEL GAS SENSOR SYSTEM

# FlexADOS 914 MED



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## MULTI-CHANNEL GAS SENSOR SYSTEM

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### Suitability

The multi-channel gas detector system FlexADOS 914 MED continuously monitors the ambient air and provides an early warning of harmful, explosive and non-flammable gases and vapours. The processing unit is installed in a rugged housing to withstand increased mechanical stresses, such as those encountered in maritime environments. The processing unit also comes with a DNV-GL class certificate and fulfils the requirements of the Ship Equipment Directive 2014/90 / EU (marking: MED wheel). Together with the GTR 210 gas transmitter family, the FlexADOS914 MED achieves safety integrity level SIL 1 and can be used for primary explosion protection.

### Areas of application

- Explosion protection on ships with LNG drives, LPG drives and LFL drives
- Explosion protection and inerting on LNG, CNG, oil and chemical tankers,
- Explosion protection in LNG terminals
- Liquid gas storage facilities
- Leakage monitoring of refrigerating units
- Laboratories
- Refineries
- Detection of oxygen deficiency and excess oxygen
- Gas powered boiler systems
- Wastewater treatment plants
- Inertisation.
- and much more

### Features

- Up to 12 analogue 4...20 mA sensors are evaluated (GTR 210 MED)
- Graphic LCD display to show actual values, mean values and faults in plain text
- Indicator for operation, malfunction, maintenance, power failure
- Simple menu-guided setting of the device parameters using 6-part keyboard
- Three alarm thresholds per sensor, independently adjustable from 10 to 90% of the measuring range
- Averaging from 1 to 60 minutes possible
- Maximum of 14 potential-free changeover contacts to control further warning and control facilities
- Potential-free changeover contact for malfunction, maintenance and power failure
- Optional: Connection to building management systems for transmission of measured values and status
- Aluminium wall housing (IP 54)
- High operating reliability
- Low power consumption
- Simple assembly
- Uninterrupted electricity supply possible

### Fieldbus expansion module

Optional data interfaces compatible with:

- LONWorks
- ModBus TCP
- Modbus RTU
- ProfiNet
- Profibus

### Measuring ranges

Gas types can be adjusted as desired Examples:	$\text{CH}_4$ methane / LNG $\text{H}_2$ hydrogen $\text{O}_2$ oxygen $\text{CO}_2$ carbon dioxide $\text{H}_2\text{S}$ hydrogen sulphide R134a tetrafluoroethane
Physical grouping freely adjustable Examples:	%LEL ppm VOL%

### Accessories

Horns, warning lights, blinker lamps, recorders, emergency power unit UPS 2000–24 V, gas cooler, gas inlet and much more. Additional accessories are offered on request depending on the measuring task.

### Technical Data

Sensors analogue 4–20mA	12 sensors in a 2- or 3-wire system
Power supply	100-240 V 50/60 Hz
Max. power consumption	60 VA
Operating conditions	-25 °C...+45 °C 80kPa...120kPa 0%–95% relative humidity non-condensing
Protection class due to housing (DIN EN 60529)	IP 54
Dimensions (WxHxD)	400 x 300 x 130 mm
Displays	Graphic LCD display 128 x 64 px Background red/green/yellow LED power, malfunction, power failure, maintenance digital inputs
digital inputs	3
digital outputs	17 relays per 1 relay Malfunction, power failure, maintenance 14 alarm relays Potential-free change-over contacts Max. switching capacity 250 V / 8 A
Other interfaces	USB Fieldbus expansion module (optional)
Weight	7 kg
Service life	> 10 years
Buffer battery clock	> 20 years
Storage conditions	max. 1 year -25 °C...+45 °C 80kPa...120kPa 0%–95% relative humidity non-condensing
Metrological permit	EN60079-29-1 EN50104 EN45544-1,-2,-3 TÜV15ATEX7801X
Certificate number	
Safety level	SIL1
MED approval:	MED Item 3.54 / SOLAS 74 u.a: IEC60092-504, IEC60533 MEDB00006DG under deck
Classification certificate	DNVGL-CG-0339
Certificate number	TAA00002JH
Classification:	Class
Temperature,	C
Humidity,	B
Vibration,	A
EMC,	B
Enclosure	B
Labelling	EN60079-29-1, EN50104 CE  II (2) G