



# DEGA NS III LCD RE

## GAS DETECTOR

- Detection types: catalytic, electrochemical, infrared, photoionization (PID), semiconductor
- Detection of toxic and combustible gases and oxygen
- For explosive environments ATEX zone 1
- Protection level IP64/ IP66 (with protection cover)
- Produced in compliance with standard SIL



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Quality management Systems  
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# Gas detector **DEGA NS III LCD RE**

DEGA NS III LCD RE detector is a part of the gas detection system. Detector is located in monitored premises in which critical situations due to accumulation of flammable or toxic substances can occur. Detector converts the measured concentration of substances into a unified signal 4 - 20mA and RS485. Detector has an LCD display to show measured concentrations of detected substances in real time; and it is equipped with 4 relays.

The detector can be connected to control panels DEGA UPA III, DEGA UKA III and DEGA UDA III.

## TECHNICAL SPECIFICATION:

Power supply	8-28 V DC
Output:	4 - 20 mA, RS485, Modbus
Cover protection level:	IP 64, with water protection cover DEGA WATER CAP IP66
Input:	1,2 W
Specification in compliance with ATEX:	II 2G Ex d IIB+H2 T6 Gb Tamb: -40°C - +60°C
Placement:	BE3N2 - areas with danger of explosion, zone1
Dimensions(WxHxD):	150 x 170 x 65 mm
Weight:	2,1 kg
Sensor technology:	catalytic, electrochemical, infrared, photoionization, semiconductor
Estimated life of sensor in clean environment:	catalytic (1-2 years),electrochemical (1-3 years), infrared (minimum 5 years), photoionization (1 year), semiconductor (1-2 years)
Relative humidity of the ambient air:	max. 95%

## SYSTEM OF TRANSMITTER MARKING:

### DEGA NSx-yL III LCD RE

→ **x** type of detected substance

→ **y** detection technology

**(CL)** Catalytic  
**(EL)** Electrochemical  
**(IL)** Infrared  
**(PID)** Photoionization  
**(SL)** Semiconductor

Detected substance	Formula	Range	Sensor	Product type
Flammable	LEL	0-100% LEL	CL	DEGA NSHC-CL III LCD RE
Flammable	LEL	0-100% LEL	IL	DEGA NSHC-IL III LCD RE
Acetone	C3H6O	0-5000 ppm	PID	DEGA NSC3H6O-PID III LCD RE
Ammonia	NH3	0-100 ppm	EL	DEGA NSA-EL III LCD RE
Ammonia	NH3	0-1000 ppm	EL	DEGA NSA-EL III HC LCD RE
Petrol vapour	C6H14	0-100% LEL	CL	DEGA NSB-CL III LCD RE
Petrol vapour	C6H14	0-100% LEL	IL	DEGA NSB-IL III LCD RE
Petrol vapour	C6H14	0-5000 ppm	PID	DEGA NSB-PID III LCD RE
Hydrogen bromide	HBr	0-20 ppm	EL	DEGA NSHBR-EL III LCD RE
Butane	C4H10	0-100% LEL	CL	DEGA NSP-CL III LCD RE
Butane	C4H10	0-100% LEL	IL	DEGA NSP-IL III LCD RE
Butane	C4H10	0-5000 ppm	PID	DEGA NSP-PID III LCD RE
Ethanol	C2H5OH	0-100% LEL	IL	DEGA NSC2H5OH-IL III LCD RE
Ethanol	C2H5OH	0-450 ppm	PID	DEGA NSC2H5OH-PID III LCD RE
Ethen	C2H4	0-100% LEL	IL	DEGA NSC2H4-IL III LCD RE
Ethylenoxide	C2H4O	0-10 ppm	EL	DEGA NSC2H4O-EL III LCD RE
Ethylenoxide	C2H4O	0-100% LEL	IL	DEGA NSC2H4O-IL III LCD RE
Ethen	C2H4	0-10 ppm	EL	DEGA NSC2H4-EL III LCD RE
Formaldehyde	CH2O	0-10 ppm	EL	DEGA NSCH2O-EL III LCD RE
Phosphane	PH3	0-5 ppm	EL	DEGA NSPH3-EL III LCD RE
Hexane	C6H14	0-100% LEL	IL	DEGA NSC6H14-IL III LCD RE
Refrigerant HFO-1234yf	HFO	0-100% LEL	CL	DEGA NSHFO-CL III HC LCD RE
Refrigerant HFO-1234yf	HFO	0 - 5000 ppm	SL	DEGA NSHFO-SL III LCD RE
Chloride	Cl2	0-20 ppm	EL	DEGA NSCL2-EL III LCD RE
Hydrogen chloride	HCl	0-20 ppm	EL	DEGA NSHCL-EL III LCD RE
Isopropyl alcohol	C3H8O	0-1250 ppm	PID	DEGA NSC3H8O-PID III LCD RE
Hydrogen cyanide	HCN	0-100 ppm	EL	DEGA NSHCN-EL III LCD RE
Oxygen	O2	0-30 % vol.	EL	DEGA NSO-EL III LCD RE

Detected substance	Formula	Range	Sensor	Product type
Methane	CH4	0-100% LEL	CL	DEGA NSM-CL III LCD RE
Methane	CH4	0-100% LEL	IL	DEGA NSM-IL III LCD RE
Butanone	C4H8O	0-5000 ppm	PID	DEGA NSC4H8O-PID III LCD RE
Nitrogen dioxide	NO2	0-20 ppm	EL	DEGA NSNO2-EL III LCD RE
Nitric oxide	NO	0-250 ppm	EL	DEGA NSNO-EL III LCD RE
Nitrous oxide	N2O	0-1% vol.	IL	DEGA NSN2O-IL III LCD RE
Chlorine dioxide	ClO2	0-1 ppm	EL	DEGA NSClO2-EL III LCD RE
Sulfur dioxide	SO2	0-20 ppm	EL	DEGA NSSO2-EL III LCD RE
Carbon monoxide	CO	0-1000 ppm	EL	DEGA NSC-EL III LCD RE
Carbon dioxide	CO2	0-5% vol.	IL	DEGA NSCO2-IL III LCD RE
Ozone	O3	0-5 ppm	EL	DEGA NSO3-EL III LCD RE
Pentane	C5H12	0-100% LEL	IL	DEGA NSC5H12-IL III LCD RE
Hydrogen peroxide	H2O2	0-100 ppm	EL	DEGA NSH2O2-EL III LCD RE
Propene	C3H6	0-100% LEL	IL	DEGA NSC3H6-IL III LCD RE
Silan	SiH4	0-50 ppm	EL	DEGA NSSiH4-EL III LCD RE
Hydrogen sulphide	H2S	0-50 ppm	EL	DEGA NSH2S-EL III LCD RE
Hydrogen sulphide	H2S	0-2000 ppm	EL	DEGA NSH2S-EL III HC LCD RE
Styrene	C8H8	0-9999 ppm	PID	DEGA NSC8H8-PID III LCD RE
Toluene	C7H8	0-9000 ppm	PID	DEGA NSC7H8-PID III LCD RE
Hydrogen	H2	0-1000 ppm	EL	DEGA NSH-EL III LCD RE
Hydrogen	H2	0-100% LEL	CL	DEGA NSH-CL III LCD RE
Hydrogen	H2	0-100% LEL	EL	DEGA NSH-EL III HC LCD RE
Refrigerant R134A, R401A, R404A, R407C, R32, R410A, R12, R22	Rx	0-5000 ppm	SL	DEGA NSR-SL III LCD RE
Other VOC	-	0-5000 ppm	PID	DEGA NSL-PID III LCD RE
Other TOX	-	According gas type	EL	More than 100 other gases
Other LEL	-	According gas type	IL	More than 100 other gases
Other LEL	-	According gas type	CL	More than 100 other gases



Transmitter is designed for detection in industrial and commercial environments requiring certification ATEX (Zone 1).

## AVAILABLE ACCESSORIES:



Protection box, steel/stainless



Mechanical protection frame



DEGA WATER CAP protection cover



DEGA FUNNEL



DEGA INLET calibration cover



DEGA NS III SU spare sensor unit

Manufacturer: DEGA CZ s.r.o. | web: [www.dega.co.com](http://www.dega.co.com)

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