



# DEGA NS II

## GAS DETECTION TRANSMITTER



- Detection types: catalytic, electrochemical, infrared, photoionization (PID)
- Detection of toxic and combustible gases and oxygen
- For explosive environments ATEX zone 2
- Protection level IP54/ IP66 (with protection cover)
- Produced in compliance with standard SIL



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Quality management Systems  
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# Gas detection transmitter **DEGA NS II**

DEGA NS II transmitter is a part of the gas detection system. Transmitter 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.

The transmitter 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
Case protection level:	IP 54, with water protection cover DEGA WATER CAP IP66
Input:	1,2 W
Specification in compliance with ATEX:	II 3 G Ex db ec IIC T5/T4 Gc Tamb: -20°C - +60°C/0°C - +40°C
Placement:	BE3N2 - areas with danger of explosion, zone 2
Dimensions(WxHxD):	140 x 140 x 70 mm
Weight:	0,7 kg
Sensor technology:	catalytic, electrochemical, infrared, photoionization
Estimated life of sensor in clean environment:	catalytic (1-2 years),electrochemical (1-3 years), infrared (minimum 5 years), photoionization (1 year)
Relative humidity of the ambient air:	max. 95%

## SYSTEM OF TRANSMITTER MARKING:

### DEGA NSx-yL II

→ **x** type of detected substance

→ **y** detection technology  
**(CL)** Catalytic  
**(EL)** Electrochemical  
**(IL)** Infrared  
**(PID)** Photoionization

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

Detected substance	Formula	Range	Sensor	Product type
Methane	CH4	0-100% LEL	CL	DEGA NSM-CL III
Methane	CH4	0-100% LEL	IL	DEGA NSM-IL III
Butanone	C4H8O	0-5000 ppm	PID	DEGA NSC4H8O-PID III
Nitrogen dioxide	NO2	0-20 ppm	EL	DEGA NSNO2-EL III
Nitric oxide	NO	0-250 ppm	EL	DEGA NSNO-EL III
Nitrous oxide	N2O	0-1% vol.	IL	DEGA NSN2O-IL III
Chlorine dioxide	ClO2	0-1 ppm	EL	DEGA NSClO2-EL III
Sulfur dioxide	SO2	0-20 ppm	EL	DEGA NSSO2-EL III
Carbon monoxide	CO	0-1000ppm	EL	DEGA NSC-EL III
Carbon dioxide	CO2	0-5 % vol.	IL	DEGA NSCO2-IL III
Ozone	O3	0-5 ppm	EL	DEGA NSO3-EL III
Pentane	C5H12	0-100% LEL	IL	DEGA NSC5H12-IL III
Hydrogen peroxide	H2O2	0-100 ppm	EL	DEGA NSH2O2-EL II
Propene	C3H6	0-100% LEL	IL	DEGA NSC3H6-IL III
Silan	SiH4	0-50ppm	EL	DEGA NSSiH4-EL III
Hydrogen sulphide	H2S	0-50ppm	EL	DEGA NSH2S-EL III
Hydrogen sulphide	H2S	0-2000 ppm	EL	DEGA NSH2S-EL II HC
Styrene	C8H8	0-9999 ppm	PID	DEGA NSC8H8-PID III
Toluene	C7H8	0-59000 ppm	PID	DEGA NSC7H8-PID III
Hydrogen	H2	0-1000ppm	EL	DEGA NSH-EL III
Hydrogen	H2	0-100% LEL	CL	DEGA NSH-CL III
Hydrogen	H2	0-100% LEL	EL	DEGA NSH-EL III HC
Other VOC	-	0-5000 ppm	PID	DEGA NSL-PID III
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 2).

## AVAILABLE ACCESSORIES:



Protection box, stainless steel



Mechanical protection frame



DEGA WATER CAP protection cover



DEGA FUNNEL



DEGA INLET calibration cover



DEGA NS II SU spare sensor unit