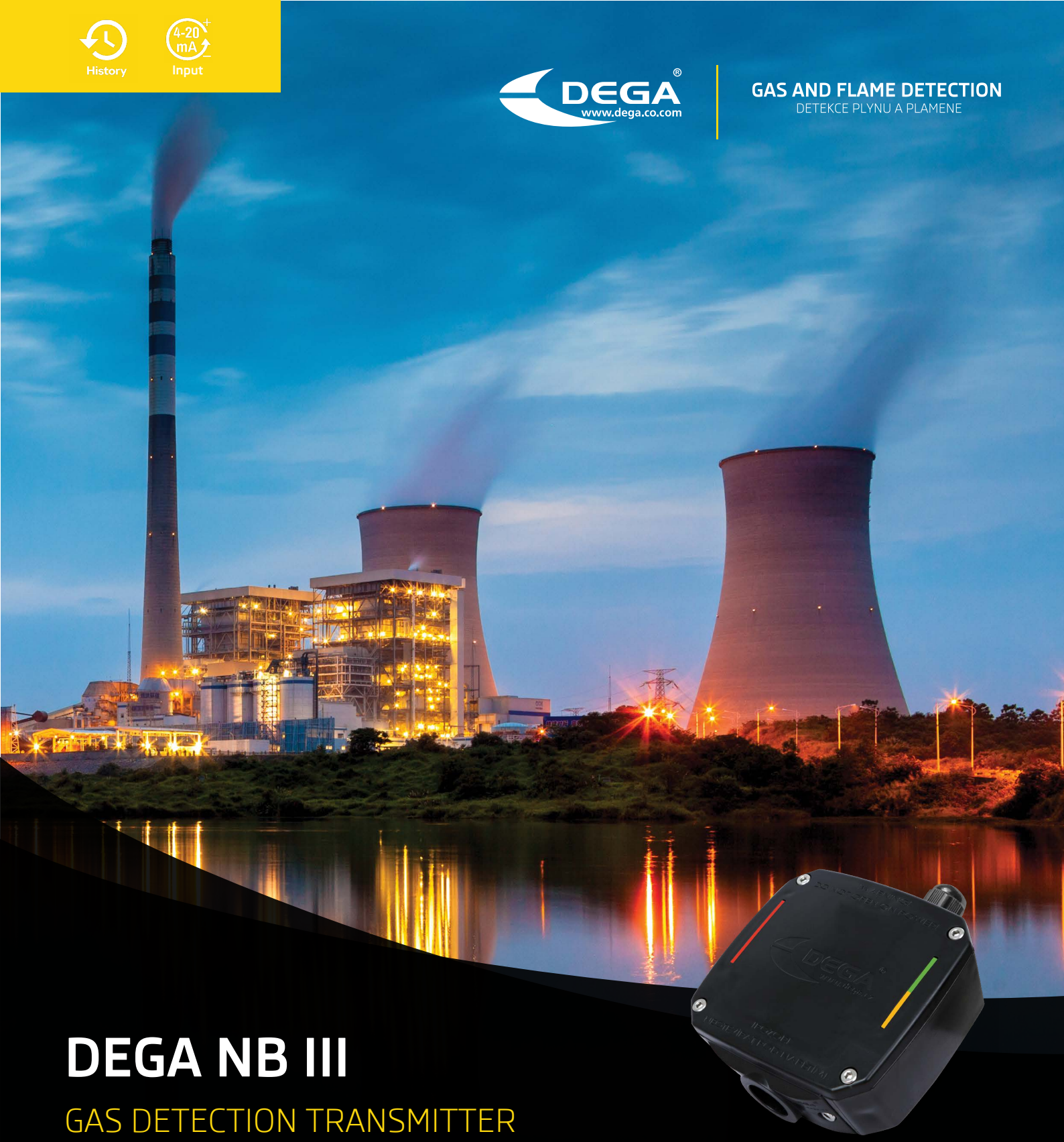
History

4-20 mA Input

DEGA®
www.dega.co.com

GAS AND FLAME DETECTION
DETEKCE PLYNU A PLAMENE



DEGA NB III

GAS DETECTION TRANSMITTER

- Types of detection: catalytic, electrochemical, infrared, photoionization (PID), semiconductor
- Detection of toxic and explosive gases, including oxygen
- IP 54 protection
- 4-20 mA output, RS485

SYSTEM CERTIFICATION ISO 9001 SGS

ISO 9001:2015
Quality management Systems
Systéme de Qualité
www.sgs.com

Gas detection transmitter **DEGA NB III**

The DEGA NB III transmitter is part of the gas detection system. It is located in a monitored area where a critical concentration of flammable or toxic substances can be formed. The transmitter converts the measured concentration into a unified current signal of 4-20 mA and RS485. The transmitter can be connected to evaluation control panels DEGA UPA III, DEGA UKA III, and DEGA UDA III.

TECHNICAL DETAILS:	
Power voltage:	8-28 VDC
Output:	4-20 mA, RS485
Degree of protection by cover:	IP 54
Power consumption:	1,2 W
Dimensions:	100 x 110 x 40 mm (WxHxD)
Weight:	0,3 kg
Sensor type:	catalytic, electrochemical, infrared, photoionization (PID), semiconductor
Estimated sensor life in the transmitter in a clean environment:	catalytic/semiconductor (1-2 years), electrochemical (1-3 years), infrared (5 years and more), photoionization (5000 hours)
Relative humidity of the surrounding air:	0-95 % RV
Working environment:	BE1 – non-explosive environment

NOMENCLATURE:

DEGA NBx-yL III

- **x** type of gas detected
- **y** sensor type . . .
  - **(CL)** Catalytic
  - **(EL)** Electrochemical
  - **(IL)** Infrared
  - **(PID)** Photoionization
  - **(SL)** Semiconductor

MODULE:

DEGA NB III RS485
(Internal output
RS485)

The transmitter is not intended for detection in industrial and commercial areas with a risk of explosion, requiring ATEX certification. We recommend DEGA NS II (zone 2) or DEGA NS III (zone 1) transmitters for these areas.

ACCESSORIES:

DEGA NB III
stainless steel cover

DEGA NB III
mechanical cover

DEGA WATER CAP
splash guard

DEGA FUNNEL
funnel

DEGA GAS INLET
calibration
attachment

DEGA NB III SU
replacement sensor
unit

Cable Glades PG9

Manufacturer: DEGA CZ s.r.o, Malesicka 2850/22c, Prague, Czech Republic I e-mail: export@dega.co.com I www.dega.co.com
VAT number: CZ27902943, EORI: CZ27902943, CIN/TIN: CZ27902943

GAS SPECIFICATIONS:

Gas	Formula	Cas	Measuring range
Acetylene	C2H2	74-86-2	0-100 % LEL
Ammonia	NH3	7664-41-7	0-100 ppm
Ammonia	NH3	7664-41-7	0-1000 ppm
Ammonia	NH3	7664-41-7	0-10000 ppm
Ammonia	NH3	7664-41-7	0-500 ppm
Ammonia	NH3	7664-41-7	0-5000 ppm
Ammonia	NH3	7664-41-7	0-2000 ppm
Bromine	Br	7726-95-6	0-20 ppm
Bromine	Br	7726-95-6	0-200 ppm
Butane / Propan-Butane / LGP	C4H10	106-97-8	0-100 % LEL
Carbon dioxide	CO2	124-38-9	0-5 % vol.
Carbon dioxide	CO2	124-38-9	0-100 % vol.
Carbon monoxide	CO	630-08-0	0-1000 ppm
Carbon monoxide	CO	630-08-0	0-200 ppm
Carbon monoxide	CO	630-08-0	0-500 ppm
Carbon monoxide	CO	630-08-0	0-2000 ppm
Ethane	C2H6	74-84-0	0-100 % LEL
Ethanol	C2H5OH	64-17-5	0-100 % LEL
Ethylene	C2H4	74-85-1	0-10 ppm
Ethylene	C2H4	74-85-1	0-200 ppm
Ethylene	C2H4	74-85-1	0-1500 ppm
Ethylene	C2H4	74-85-1	0-100 % LEL
Ethylene oxide	C2H4O	75-21-8	0-10 ppm
Ethylene oxide	C2H4O	75-21-8	0-100 ppm
Ethylene oxide	C2H4O	75-21-8	0-1000 ppm
Ethylene oxide	C2H4O	75-21-8	0-500 ppm
Ethylene oxide	C2H4O	75-21-8	0-100 % LEL
Formaldehyde	CH2O	50-00-0	0-10 ppm
Formaldehyde	CH2O	50-00-0	0-50 ppm
Formaldehyde	CH2O	50-00-0	0-1000 ppm
Hexane (Petrol)	C6H14	110-54-3	0-100 % LEL
Hydrogen	H2	1333-74-0	0-100 % LEL
Hydrogen	H2	1333-74-0	0-1000 ppm
Hydrogen	H2	1333-74-0	0-4000 ppm
Hydrogen	H2	1333-74-0	0-40000 ppm
Hydrogen bromide	HBr	10035-10-6	0-20 ppm
Hydrogen bromide	HBr	10035-10-6	0-200 ppm
Hydrogen cyanide	HCN	74-90-8	0-50 ppm
Hydrogen fluoride	HF	7664-39-3	0-10 ppm
Hydrogen chloride	HCl	7647-01-0	0-20 ppm
Hydrogen chloride	HCl	7647-01-0	0-200 ppm

Gas	Formula	Cas	Measuring range
Hydrogen peroxide	H2O2	7722-84-1	0-100 ppm
Hydrogen peroxide	H2O2	7722-84-1	0-500 ppm
Hydrogen sulfide	H2S	7783-06-4	0-50 ppm
Hydrogen sulfide	H2S	7783-06-4	0-500 ppm
Hydrogen sulfide	H2S	7783-06-4	0-100 ppm
Hydrogen sulfide	H2S	7783-06-4	0-2000 ppm
Chlorine	CL2	7782-50-5	0-20 ppm
Chlorine	CL2	7782-50-5	0-200 ppm
Chlorine dioxide	ClO2	10049-04-4	0-50 ppm
Methane	CH4	74-82-8	0-100 % LEL
Nitric oxide	NO	10102-43-9	0-25 ppm
Nitric oxide	NO	10102-43-9	0-250 ppm
Nitric oxide	NO	10102-43-9	0-1000 ppm
Nitrogen dioxide	NO2	10102-44-0	0-20 ppm
Nitrogen dioxide	NO2	10102-44-0	0-100 ppm
Nitrogen dioxide	NO2	10102-44-0	0-500 ppm
Nitrous oxide	N2O	10024-97-2	0-1 % vol.
Organic acids	RCOOH	–	0-100 ppm
Other flammable and combustible gases and vapors	HC	–	0-100 % LEL
Oxygen	O2	17778-80-2	0-1 %
Oxygen	O2	17778-80-2	0-30 %
Ozone	O3	10028-15-6	0-5 ppm
Ozone	O3	10028-15-6	0-100 ppm
Pentane	C5H12	109-66-0	0-100 % LEL
Phosphine	PH3	7803-51-2	0-5 ppm
Phosphine	PH3	7803-51-2	0-20 ppm
Phosphine	PH3	7803-51-2	0-200 ppm
Phosphine	PH3	7803-51-2	0-2000 ppm
Propylene	C3H6	115-07-1	0-100 % LEL
Refrigerant	R	–	0-2000 ppm
Refrigerant	HFO	754-12-1	0-2000 ppm
Silane	SiH4	7803-62-5	0-1 ppm
Sulfur dioxide	SO2	7446-09-5	0-20 ppm
Sulfur dioxide	SO2	7446-09-5	0-200 ppm
Sulfur dioxide	SO2	7446-09-5	0-2000 ppm
Sulfur dioxide	SO2	7446-09-5	0-100 ppm
Sulfur dioxide	SO2	7446-09-5	0-1000 ppm
Sulfur dioxide	SO2	7446-09-5	0-10000 ppm
Volatile organic compounds	VOC	–	"0-20 ppm (el. sensor)"
Volatile organic compounds	VOC	–	"0-3000 ppm - according to gas (PID sensor)"

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