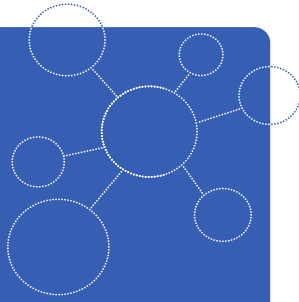


GERMAN TECHNOLOGY



PGD alpha

Portable Gas Detector alpha

#2-E22-NI21-E50

CO 10000ppm / CO₂ 100 Vol.% / O₂ 21 Vol.%

Product features:

- Full Day battery life(8h)
- Usable during charging
- Easy One Hand operating
- Automatic calibration
- Alarm functions
- Automatic Data Storage
- USB Interface
- Windows Software
- IATA flight transport certification



PGD alpha of **smartGAS** is a high-performance solution for quick and accurate detection of multiple gases. The fields of application range from detection of gas concentrations in pipelines or conformed spaces, atmospheric environments, gas leaks and single or multiple gas purity tests where the background gas is nitrogen or air. The **PGD alpha** is the perfect choice for portable gas detection tasks, gas alarm and personal safety.

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PGD alpha #2-E22-NI21-E50 CO 10000ppm / CO₂ 100 Vol.% / O₂ 21 Vol.%

General features

Release date: 11 Dec 2025

Portable Gas Detector

Gas Connection:	6/4mm PU Tube
Dimensions/Weight:	217x92x80mm (length, width and height)/ 850g (depend on configuration)
User Interface:	Press Button, 4.3-inch TFT
Gas Inlet by Suction:	With build-in pump (300ml/min)
Inlet Gas Temp.:	5 ... 35 °C
Inlet Gas Pressure:	Environment Pressure
Moisture in Gas:	inlet gas dew point: 5 °C ±0.1 °C
Dust in gas flow:	100 µg/m ³ , ≤ 1µm
Warm-up time (full specification):	< 3 minutes
Internal Gas Tubing:	PU (certified)
Zero Calibration Gas :	Nitrogen/Ambient Air
Span Calibration Gas Background:	Nitrogen/Air

Measuring*

Response time (t90)**:	< 30 s						
Gas	Technology	Range	Linearity Error	Display	C.C**	P.C***	
1 CO	EC	0 ... 10000 ppm	<±2%[FS]	XXXXX	/	no	Overrange 20000 ppm
2 CO ₂	MND IR	0 .. 100 Vol.%	<±2%[FS]	XXX.x	/	no	
3 O ₂	ECX	0 .. 21 Vol.%	<±2%[FS]	XX.x	/	no	Overrange 25 Vol.%

Electrical parameters

Charger:	USB Charger 10,5W
Power Connector:	By Country Code
Interface:	USB Type-C

Climatic conditions

Operating / Charging temperature:	5 ... 40 °C / 0 ... 45 °C
Storage temperature:	-20 ... + 60 °C
Air pressure:	760 ... 1160 hPa
Ambient humidity:	10 ... 95 % relative humidity (not condensing)

Accessories to be ordered separately :

Charger	Power Cable (Refer to the requirement of country)
Transport Box	Carrying Bag with shoulder harness
Sampling Probes	

* Typical values related to 1013 hPa, Ta = 22 °C, flow = 0.7 L/ min for dry (not condensing) and clean sample gas.

Stated values exclude calibration gas tolerance.

** C.C : Internal Cross compensated by other gas

*** P.C : Pressure compensated

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For more information, please visit www.smartgas.eu or contact us at sales@smartgas.eu

Please consult smartGAS sales for parts specified with other temperature and measurement ranges. At first initiation and depending on application and ambient conditions recalibration is recommended. Recurring cycles of recalibration are recommended.