Dräger X-pid 9500 / X-pid 9500+
Multi-Gas Detector

The selective PID gas measurement device is ideal for users who frequently test for hazardous toxic substances. Butadiene, carbonates and other volatile organic compounds (VOCs) are carcinogenic even in the smallest concentrations. Selective measurement is necessary because other gases and vapours are often also present. The gas measurement device allows for short test times and laboratory-quality results.

Dräger

Technology for Life

Dräger X-pid 9500 / X-pid 9500+

Sensor unit
compiles measurement values and sends them via Bluetooth to the control unit

Integrated photoionisation detector (PID)
for measuring in the low ppb range

Control unit
with large touch screen and connectivity via Wi-Fi and 4G/LTE

Integrated gas chromatography (GC)
to seperate compounds in gas-vapour-mixtures

Integrated pump
for attaching a hose of up to 10 m length

Mobile app
allows intuitive handling and control

D-1202-2021

Benefits

Two modes for an efficient measurement strategy

“Seeker” mode is a broadband measurement for pre-testing and localising measurement points. It allows continuous, direct-reading measurement of the total concentration of all VOCs present. “Seeker” mode is similar to using a single-PID gas measurement device.

“Analysis” mode allows selective measurement for monitoring specific toxic compounds. Pre-defined target compounds can be precisely measured in seconds. “Analysis” mode is similar to gas chromatography analyses conducted in the laboratory.

Up to 90% time savings

The Dräger X-pid 9500 requires no preparation and is ready to use after a brief start-up phase. Selective measurement in “Analysis” mode takes only a few seconds. A benzene measurement starts with the push of a button and is completed in only 30 seconds. After another 60 seconds, the device is ready to measure for benzene again. Compared with other detection systems, the Dräger X-pid 9500 saves considerable time and enables further monitoring to be undertaken. Simultaneous measurement of other compounds, like benzene and butadiene, further reduces testing times.

Cost savings

Because no consumables are used to take measurements, operating costs can be reduced. For users with high measurement needs, the Dräger X-pid 9500 quickly pays for itself. For example, it requires no pre-tubes, also making it easier to use and preventing user errors. On the basis of 200 measurements per year, the Dräger X-pid 9500 is generally more cost-effective than comparable measurement systems.

High selectivity for greater safety

The selective measurement mode “Analysis” relies on technology which separates individual compounds present in mixed gases. This makes it possible to conduct a compound-specific measurement for benzene, even if other VOCs like toluene and xylene are also present in high concentrations. Cross-sensitivities for benzene are reduced to a minimum. This reduces the number of false-positive measurement results and false alarms.

Reliable performance under tough conditions

The influence on measurement results by environmental factors like variable ambient temperature or high humidity are reduced to a minimum. The sensor unit maintains a constant temperature above the ambient air temperature and separates water vapour from the target compounds. This ensures reliable measurements under tough environmental conditions.

Low detection limits

Concentrations of toxic compounds in the air at work sites must not exceed threshold limit values. Mandatory time-weighted averages in the low ppb to ppm range need to be performed for carcinogenic vapours like benzene, acrolein or other. The Dräger X-pid 9500 is optimised for measuring in this concentration range and detects benzene starting at 50 ppb. The X-pid 9500+ variation contains an improved calculation model that allows even lower detection limits (benzene starting at 5ppb).

Benefits

Intuitive handling with mobile app

The sensor unit is controlled and the measurment data processing is conducted by a mobile app installed on an explosion-proof smartphone (delivery includes both). The large touch screen and familiar user interface elements are easy to use. This makes the sophisticated technology accessible to a broad group of users. No prior knowledge or extensive training is required.

Laboratory-quality measurement results

The gas measurement device is based on gas chromatography (GC) and photoionization detection (PID) technologies. These technologies, used widely in laboratories, have a high acceptability due to their excellent analytical performance. The Dräger X-pid 9500 brings these technologies directly to the hazardous area of any production site.

Simple functional test and calibration

The functional test with the test gas isobutylene and toluene is done in just two minutes and the Dräger X-pid 9500 is ready to use. During the test the user is guided through the user interface step-by-step. The calibration is completed within about four minutes.

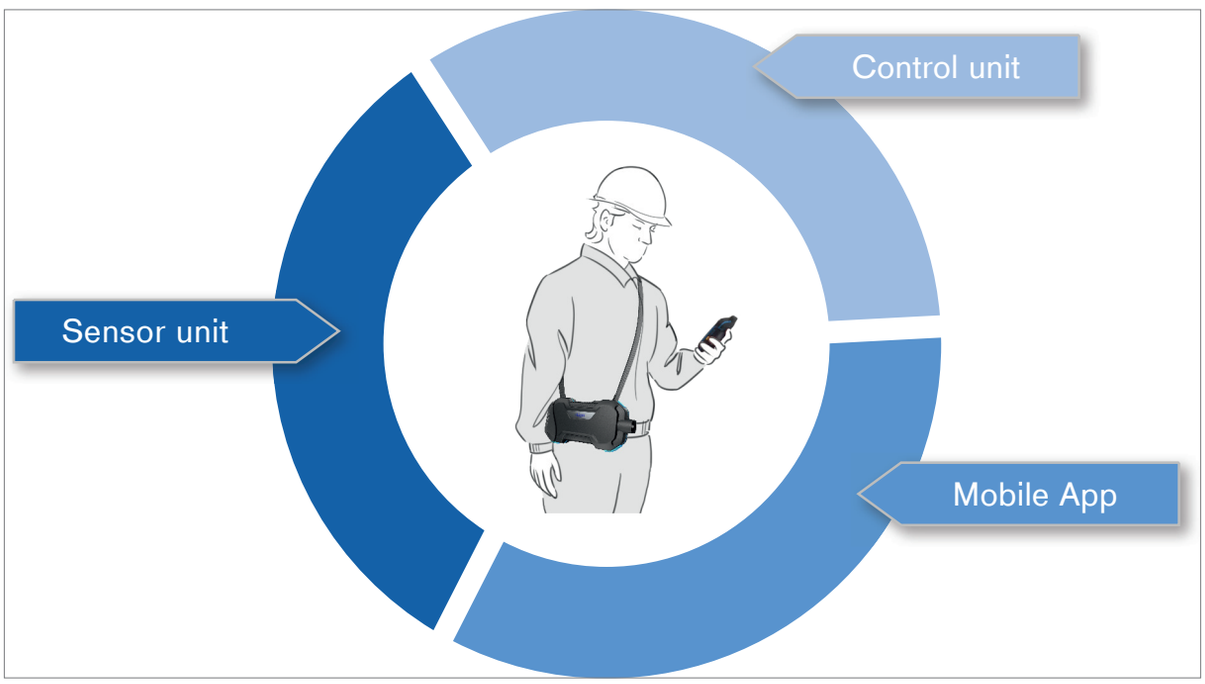
Software Interfaces

The GasVision 8 software is a Windows-based software with which you can professionally visualize and evaluate the data logger of your Dräger X-pid. It is also possible to create an Excel-based export for further analyses.

Stationary mode

The stationary mode is an extension of the analyze mode. The user creates time series of gas measurements. These can be started automatically using set time intervals or triggered by a defined trigger thresholds. The gas measurement values of the seeker pid are automatically saved and can be exported. This enables continuous monitoring of a measuring point.

Innovative operating design



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The Dräger X-pid® 9500/ X-pid 9500+ consists of three elements: You control the sensor unit via the control unit and the pre-installed mobile app. The sensor unit can be worn around the neck, keeping one hand free.

Independent Third Party Evaluation

Below you will find the laboratory results (deviation in %) of the independent Scientific and Technical Federal Institute (Bundesanstalt für Materialforschung). The deviation of the adjusted and measured benzene quantity in a BTEX mixture (benzene, toluene, ethylbenzene, xylenes) is given in percent. The measurements were carried out at 20 %, 50% and 80 % relative humidity and -10 °C, 20 °C and 25 °C

benzene (ppm)	20 % relative humidity		50 % relative humidity		80 % relative humidity
	- 10 °C	25 °C	- 10 °C	25 °C	20 °C
0,4	8 %	16 %	8 %	18 %	9 %
1	7 %	15 %	10 %	22 %	8 %
5	10 %	18 %	12 %	21 %	11 %
10	9 %	21 %	16 %	23 %	15 %
15	-	-	27 %	25 %	-
25	21 %	24 %	-	-	-

x-pid-9500-graphic-2nd-en

All measurements were carried out using a gas chromatograph in parallel with the Dräger X-pid in order to be able to calculate an absolute deviation. The Dräger X-pid is optimised for low concentrations, which is evident, among other things, in the low deviation for 0.4 ppm benzene. The deviations show positive measurement deviations of the Dräger X-pid, i.e. the device displays slightly higher values and thus runs into the more favourable false positive positive case as desired.

Accessories

D-0494-2018

Calibration gas and accessories

Calibration of equipment will ensure safe operation and functionality of equipment and will also meet with the applicable regulations and codes of practice. Various calibration options are easily available.

D-34536-2009

Case with inlay for Dräger X-pid® 9500/9500+

For convenient transport of sensor unit, control unit, calibration gas cylinder, chargers and sampling accessories.

D-4735-2017

Sampling probes and hoses

Selection of sampling accessories for various applications.

Services

D-2331-2016

Product Service

Our product service department supports you with a range of service packages – in our shops or on site in your plant. Care, servicing and maintenance are key factors when it comes to safety. Diligent maintenance and care is also absolutely necessary from an economics perspective. Preventive checks, service procedures and original replacement parts make your investment last longer.

Technical Data

The technical specifications refer exclusively to the Dräger X-pid® 9500/9500+ sensor unit.

Dimensions (W x H x D)		Ca. 132 x 281 x 56 mm
Weight		Ca. 880 g (2 lb)
Ambient conditions in operation	Temperature	-10 to +35 °C
	Pressure	700 to 1,300 mbar
	Relative humidity	10 % to 95 % RH
Protection class		IP54
Start-up phase		Ca. 10 min
		can be increased at low ambient temperatures
Operating times		Typically 8 h, reduces with lower ambient temperatures
Approvals	ATEX	II 1G Ex ia IIC T4 Ga
	IECEx	Ex ia IIC T4 Ga
	cCSAus	Class I, Div.1 Group A,B,C & D T4 Class I, Zone 0, A/Ex ia IIC T4 Ga
	CE Marking	RED (Directive 2014/53/EU)
		ATEX (Directive 2014/34/EU)

Ordering Information

Description	Order number
Control unit X-pid 9500+ EU/US/CAN	37 29 690
Upgrade X-pid 9500 into X-pid 9500+	37 29 699
Dräger X-pid 9500 with sensor unit, power supply, shoulder strap, water and dust filter and gassing adapter with control unit with preinstalled Mobile App, belt clip, power supply and charging cable	68 51 848
Test gas 58L C4H8/C7H8 / N2 (10 ppm)	68 14 046
Control valve basic 0.5 LPM; fits to 58 l Test gas cylinder	68 10 397
Dräger X-pid® 9000/9500 test gas adapter	68 51 850
Case for Dräger X-pid® 9000/9500	68 51 851
Sampling hose Tygon with inlined PTFE hose Length (3 m); OD: 8 mm; ID: 4.8 mm; WD: 1.6 mm	83 26 980
Sampling hose Tygon with inlined PTFE hose Length (15 m); OD: 8 mm; ID: 4.8 mm; WD: 1.6 mm	45 94 679
Sampling hose FKM (solvent resistant) OD: 6.4 mm; ID: 3.2 mm; WD: 1,6 mm	83 25 837
Dust and water filter with hose adapter	83 19 364
Filter kit 20 pcs. X-am 1/2/5000	37 05 997
Telescopic probe ES 150 Length up to 150 cm with FKM sampling hose extension	83 16 533
Bar probe 90 Length: 90 cm with FKM sampling hose extension	83 16 532
Float probe without hose	68 02 337

Notes

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Notes

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