

## Dräger X-pid® 8500 Multi-Gas Detection

The selective PID gas measurement device is ideal for users who frequently test for hazardous toxic substances. Benzene, butadiene and other volatile organic compounds (VOCs) are carcinogenic even in the smallest concentrations. Selective measurement is necessary because other gases and vapors are often also present. The Dräger X-pid® 8500 allows for short test times and laboratory-quality results.



## Benefits

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### Integrated techniques bring gas detection to a new level

The Dräger X-pid 8500 allows selective measurement for monitoring specific compounds. Pre-defined target compounds can be accurately measured in seconds. The Dräger X-pid 8500 analyzer is a streamlined version of gas chromatography analyses conducted in the laboratory. But it builds on that as the user now can easily take the analysis to the field where intrinsic safety certifications may be required.

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### Time savings of up to 90%

The Dräger X-pid 8500 requires no preparation and is ready to use after a brief start-up phase. Selective measurement 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 8500 saves considerable time and enables further monitoring to be undertaken. Simultaneous measurement of other compounds further reduces testing times.

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### 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 8500 quickly pays for itself. For example, it requires no pre-tubes, also making it easier to use and helps prevent user errors. On the basis of about 200 measurements per year, the Dräger X-pid 8500 is generally more cost-effective than comparable yet more cumbersome measurement systems.

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### High selectivity for greater safety

The X-pid 8500 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.

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### 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 vapor from the target compounds. This ensures reliable measurements under tough environmental conditions.

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### 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 vapors like benzene. The Dräger X-pid 8500 is optimized for measuring in this concentration range and detects benzene concentrations as low as 50 ppb.

## Benefits

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### **Intuitive handling with mobile app**

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

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### **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 8500 brings these technologies directly to the hazardous area of any production site.

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### **Simple functional test and easy calibration**

The functional test with isobutylene and toluene test gases is done in just two minutes and the Dräger X-pid 8500 is ready to use. During the functional test the user is guided through the user interface step-by-step. Only if the functional test fails, a calibration with the same test gas standard will be required, which will be completed in about four minutes.

## Innovative operating design



The lightweight and easy to use gas measurement device consists of three components: a sensor unit and a control unit with a pre-installed mobile app.

## Accessories



ST-5090-2005

### Calibration gas and accessories

For the safe operation of devices, applicable regulations and statutory provisions are to be met and complied with. Therefore, regular calibrations and function tests are necessary. Different systems are available so that products meet a wide range of calibration requirements.

## Accessories



### Case with inlay for Dräger X-pid® 8500

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



### Sampling probes and hoses

Selection of sampling accessories for various applications.

## Services



### Dräger Service

Minimize risk and maximize your plant's safety and performance with Dräger service solutions. With service and rental options customized for your business operations, Dräger Services offer seamless support, less downtime, and more budget security. When your devices are serviced by the same team of experts that engineered them and are back by over 125 years of experience, you get complete peace of mind. That's the Dräger Service Advantage.

## Technical Data

The technical specifications refer exclusively to the Dräger X-pid® 8500 sensor unit.

Dimensions (W x H x D)		Approx. 5.2 x 11.1 x 2.2 in (132 x 281 x 56 mm)
Weight		Approx. 880 g (2 lb)
Ambient conditions	Temperature	14 °F to 95 °F (-10 to +35 °C)
	Pressure	700 to 1,300 mbar
	Relative humidity	10% to 95% RH
Protection class		IP54
Start-up phase		Approx. 10 min can be increased at low ambient temperatures
Operating times		Typically 6 h, reduces with lower ambient temperatures
Approvals	Sensor Unit	Control Unit (ecom Smart-Ex 01)
	Ex-Zone	0
	ATEX	II 1G Ex ia IIC T4 Ga IP54
	IECEX	Ex ia IIC T4 Ga IP54
	cCSAus	Class I, Div 1 Groups A-D T4

### A Versatile Detector for more than 19 compounds

The Dräger X-pid 8500 offers the possibility of combining more than 19 target compounds into individual analysis programs thus expanding its application range.

### List of Dräger X-pid® 8500 target compounds

Target compound	CAS number
Acrolein	107-02-8
Benzene	71-43-2
Butadiene, 1,3-	106-99-0
Dichloroethylene (cis)	156-59-2
Dichloroethylene (trans)	156-60-5
Dichloroethylene, 1,1-	75-35-4
Ethyl benzene	100-41-4
Ethylene oxide	75-21-8
Hexane, n-	110-54-3
Isobutylene	115-11-7
Propylene oxide	75-56-9
Styrene	100-42-5
Tetrachloroethylene (Per)	127-18-4
Toluene	108-88-3
Trichloroethylene	79-01-6
Vinyl chloride	75-01-4
Xylene, m-	108-38-3
Xylene, o-	95-47-6
Xylene, p-	106-42-3

## Ordering Information

Description	Order number
Dräger X-pid® 8500 with sensor unit, control unit with pre-installed mobile app, test gas adapter, power supplies and charging cables	68 50 010
Test and calibration gas 58 l	37 01 900
Isobutylene 10 ppm, Toluene 10 ppm	
Test gas 103 l	37 00 266
Benzene 5 ppm	
Control valve basic 0.5 LPM; fits to 58 l Test gas cylinder	45 57 020
Dräger X-pid® 8500 test gas adapter	68 51 850
Case for Dräger X-pid® 8500	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
Dust and water filter w/o hose adapter	83 19 359
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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