

# Dräger X-am<sup>®</sup> 2500 Multi-Gas Detection

The Dräger X-am<sup>®</sup> 2500 was especially developed for use as personal protection. The 1 to 4 gas detector reliably detects combustible gases and vapours, as well as O<sub>2</sub>, CO, NO<sub>2</sub>, SO<sub>2</sub> and H<sub>2</sub>S. Reliable and fully mature measuring technology, durable sensors and easy handling guarantee a high degree of safety with extremely low operating costs.



### **Benefits**

#### **Durable electrochemical sensors**

Fully developed, high performance Dräger sensors in an extra small format for CO, H<sub>2</sub>S, O<sub>2</sub>, SO<sub>2</sub> and NO<sub>2</sub> gases enable safe use in industry, mining and in refineries. The impressive hydrogen sulphide sensor has a high resolution, so it can reliably measure even very low workplace limits. The non-consumptive and lead-free sensor for oxygen is characterized by an especially long service life of more than 5 years. Our CO and H<sub>2</sub>S sensors also have this long service life expectation, so they contribute to especially low operating costs.

#### Poison resistant ex sensor

The innovative, catalytic Ex sensor is im- pressive due to its high resistance to silicone and hydrogen sulphide. Together with the high degree of drift stability, this resistance enables an extraordinarily long service life of more than 4 years. Its sensitivity with regard to flammable gases and vapours is tested in accordance with the technical approval for measuring IEC/EN 60079-29-1 from methane to nonane. This approval also demonstrates the suitability of this instrument for primary explosion protection, e.g. for use in refineries and in the chemical industry.

#### Maximum safety

The Dräger X-am 2500 has Ex approval for zone 0, so it is clearly designed for very high user safety in areas subject to explosion hazard. The functional design ensures that gas can enter from above and from the side – even if the instrument is inside a pocket or if the front gas entry is accidentally covered.

#### Maintenance: fast, easy, inexpensive

From functional test to complete documentation, users have access to practical solutions that provide safety for implementation at any time. The Dräger Bump Test Station, which does not require a local power source, and the automatic Dräger X-dock testing and calibration station for comprehensive equipment management are ideal system additions that save time and effort. Together with the Dräger X-dock, the high quality Dräger sensors enable quick bump tests of 8 to 15 seconds<sup>1</sup> with very low gas consumption. This significantly reduces your equipment operating costs.

<sup>1)</sup> With standard sensors: CH<sub>4</sub>, O<sub>2</sub>, CO, H<sub>2</sub>S

#### **Diffusion or pump**

For clearance measurements for tanks and shafts or when searching for leaks, an optional external pump with a hose up to 30 m long is the optimum solution. The pump starts automatically when the measuring instrument is inserted in the external pump. The switch from diffusion to pump operation can be handled quickly and easily without tools or screws.

## **Benefits**

#### **Ergonomic and robust**

Thanks to its low weight and ergonomic design, the Dräger X-am 2500 offers a high degree of wearing comfort. The practical 2008two button control panel and easy menu navigation allow the instrument to be used intuitively, despite its comprehensive functionality. The integrated protective rubber coating and sensors that are not sensitive to shock provide additional safety in case of impacts or vibrations. More-over, the Dräger X-am 2500 is not sensitive to electromagnetic radiation, e.g. from wireless devices. The Dräger X-am 2500 is water and dust resistant in accordance with protection class IP67, so it remains fully functional even if it falls into the water.

#### **Reliable power supply**

The Dräger X-am 2500 can operate with either alkaline batteries or with rechargeable NiMH batteries. This enables a reliable power supply for more than 12 hours, and with the high capacity battery pack more than 13 hours. Depending on the requirements, the batteries can be charged either in the workshop or in a vehicle. Operating time without Ex sensor is typically more than 250 hours.

### System components



#### Dräger X-dock® 5300/6300/6600

The Dräger X-dock<sup>®</sup> series provides you with full control of your portable Dräger gas detection instruments. Automatic bump tests and calibrations with reduced test gas consumption and short testing times save time and money. Comprehensive documentation and evaluations provide you with a clear overview.

# System components



#### **Dräger Bump Test Station**

Easy to use, stand-alone and portable. With the Bump Test Station, functionality tests of gas detection and warning devices can be carried out easily and quickly.

## Accessories



#### Dräger X-am 125, external pump

External pump for hose length of up to 30 meters (98 feet). Makes it possible to use the detector for pre-entry measurements into confined spaces such as tanks, shafts, etc. The pump starts automatically when the detector is inserted. The change between diffusion and pump operation is quickly and easily possible without any need for additional tools or steps.

ST-9477-2007

D-12284-2009



Consisting of: NiMH power supply, charging module, single charger



# **Related Products**



#### Dräger X-am® 5000

The Dräger X-am<sup>®</sup> 5000 belongs to a generation of gas detectors, developed especially for personal monitoring applications. This 1- to 5-gas detector reliably measures combustible gases and vapors as well as  $O_2$  and harmful concentrations of toxic gases, organic vapors, Odorant and Amine.

D-27784-2009

#### Dräger X-am<sup>®</sup> 5600

Featuring an ergonomic design and innovative infrared sensor technology, the Dräger X-am 5600 is the smallest gas detection instrument for the measurement of up to 6 gases. Ideal for personal monitoring applications, this robust and water-tight detector provides accurate, reliable measurements of explosive, combustible and toxic gases and vapors as well as oxygen.



#### Dräger X-am® 7000

Dräger X-am<sup>®</sup> 7000 is the solution for the simultaneous and continuous measurement of up to five gases. It is the ideal companion in a variety of applications where the reliable detection of oxygen, toxic and combustible gases and vapors are necessary.

# **Technical Data**

Dimensions (W $\times$ H $\times$ D)		48 × 130 × 44 mm	
Weight		220 – 250 g	
Ambient conditions	Temperature	-20 to +50 °C	
	Pressure	700 to 1,300 mbar	
	Relative humidity	10 to 95 % r.h.	
Protection class		IP67	
Alarms	Visual	360°	
	Audible	Multi-tone > 90 dB at 30 cm	
	Vibration		
Operating times		> 12 h with alkaline and NiMH,	
		> 13 h with NiMH HC,	
		> 250 h w/o Ex sensor with alka	line batteries
Charging time		< 4 h	
Datalogger		Retrievable using an infrared into	erface > 1,000 h with 4 gases at a
		recording interval of 1 value per	minute
Approvals	ATEX	I M1 Ex ia I Ma, II 1G Ex ia IIC T3 Ga, I M2 Ex d ia I Mb,	
		II 2G Ex d ia IIC T4/T3 Gb	
		Performance approval to:	
		EN 50104 (2002) + A1(2004)	O <sub>2</sub>
		EN 45544	CO & H <sub>2</sub> S
		EN 60079-29-1:2007	Methane to nonane
		EN 50271:2010	Software and documentation
	CSA	Class I Div. 1 Group A, B, C, D	TCode T4/T3
	(Canada & USA)	A/Ex ia IIC T3 /Ga	
		A/Ex d ia IIC T4/ T3 /Gb	
	IECEx	Ex ia I Ma	
		Ex ia IIC T3 Ga	
		Ex d ia I Mb	
		Ex d ia IIC T4/ T3 Gb	
	CE mark	Electromagnetic Compatibility (Directive 2004/108/EC); ATEX (Directive 94/9/EC)	
	MED	Marine Equipment Directive (Dir	rective 96/98/EC)

# Ordering Information

Dräger X-am <sup>®</sup> 2500	Order No.
Dräger X-am <sup>®</sup> 2500	
Available in various versions. Cannot be modified later with other	
sensors. Includes calibration certificate. No power supply included.	
Dräger X-am® 2500 EX <sup>1)</sup>	83 23 910
Dräger X-am® 2500 Ex, O <sub>2</sub> <sup>1)</sup>	83 23 912
Dräger X-am <sup>®</sup> 2500 Ex, O <sub>2</sub> , H <sub>2</sub> S-LC <sup>1)</sup>	83 23 914
Dräger X-am <sup>®</sup> 2500 Ex, O <sub>2</sub> , CO <sup>1)</sup>	83 23 916
Dräger X-am <sup>®</sup> 2500 Ex, O <sub>2</sub> , H <sub>2</sub> S-LC, CO <sup>1)</sup>	83 23 918
Dräger X-am <sup>®</sup> 2500 Flex <sup>1)</sup>	83 23 900

Choice of four sensors (1 slot for CatEx and 3 slots for XXS sensors). Can be modified later with other sensors.

# Ordering Information

### Includes calibration certificate. No power supply included.

DrägerSensors	Measuring range	Resolution	Response time(t <sub>90</sub> )	Expected service life	
CatEx 125 PR <sup>1)</sup>	0 – 100 % LEL	1 % LEL	10 sec.	> 4 years	68 12 950
	0 – 5 Vol% CH4				
CatEx 125 Mining PR	0 – 100 % LEL	1 % LEL	10 sec.	> 3 years	68 13 080
	0 - 100 Vol% CH4				
DrägerSensor XXS	0 – 25 Vol%	0,1 Vol%	10 sec.	> 5 years	68 10 881
O <sub>2</sub> <sup>1)</sup>					
DrägerSensor CO <sup>1)</sup>	0 – 2,000 ppm	2 ppm	15 sec.	> 5 years	68 10 882
DrägerSensor XXS	0 – 100 ppm	0,1 ppm	15 sec.	> 5 years	68 11 525
H <sub>2</sub> S LC <sup>1)</sup>					
DrägerSensor NO <sub>2</sub>	0 – 50 ppm	0,1 ppm	15 sec.	> 3 years	68 10 884
DrägerSensor SO <sub>2</sub>	0 – 100 ppm	0,1 ppm	15 sec.	> 3 years	68 10 885

<sup>1)</sup> Dräger provides a 3 year guarantee on the Dräger X-am<sup>®</sup> 2500 and these sensors.

The legal rights arising from defects remain unaffected.

#### Power supply units

NiMH power pack T4 with charging module and PSU (complete set)	83 18 785
NiMH power pack T4	83 18 704
NiMH HC power pack T4 with charging module and PSU	83 22 785
(complete set)	
NiMH HC power pack T4	83 22 244
Alkaline power pack (w/o batteries)	83 22 237
Alkaline batteries T4 (2 pcs.) for power pack 83 22 237	83 22 240

#### Charging accessories

83 18 639
83 20 333
83 15 805
83 16 994
83 15 635
45 30 057
83 18 779

#### Pump accessories

83 19 400
83 19 195
83 19 399
83 20 467

#### Calibration accessories

Calibration cradle for Dräger X-am® 1/2/5x00	83 18 752
Dräger X-dock® 5300 for Dräger X-am® 1/2/5x00	83 21 880
Other versions of Dräger X-dock®	by request

# Ordering Information

Dräger Bump Test Station for Dräger X-am® 1/2/5x00 (w/o gas	83 19 131
cylinder)	
Dräger Bump Test Station for Dräger X-am® 1/2/5x00, incl. gas	83 19 130
cylinder 58L (gas and concentration can be selected)	
Nonane tester for Dräger X-am® 1/2/5x00	83 20 080
Communication Accessories	
Communication Accessories Dräger GasVision	83 14 034
Communication Accessories	83 14 034 Freeware

#### CORPORATE HEADQUARTERS

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