

# Dräger X-am<sup>®</sup> 5600 Multi-Gas Detection Device

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.



## **Benefits**

#### Small yet robust

Small, light and easy to use - the robust and water-tight gas detector X-am 5600 is designed for single-handed operation in tough industrial environments. Water- and dustproof according to IP 67 and with an integrated rubber boot, the device provides optimal functionality even under harsh conditions.

### **Durable infrared technology**

Thanks to the high stability and a resistance to contamination, Dräger infrared sensors can generally be used for up to eight years. This advanced technology reduces the cost of ownership considerably because less replacement sensors are needed. In addition, a sensor calibration is only necessary every 12 months which reduces maintenance costs.

#### Single or dual sensor - accurate measurement results

The infrared sensor IR Ex allows the measurement of explosive, combustible hydrocarbons in the range of the lower explosive limit. The infrared sensor IR CO<sub>2</sub>, with a measurement resolution of 0.01 Vol.-%, provides safe and exact measurements as well as a warning against toxic concentrations of carbon dioxide in the ambient air. For those applications where the reliable measurement of explosive substances and CO<sub>2</sub> is specifically needed, the advantages of both can be achieved by a dual sensor (Dual IR CO<sub>2</sub>/Ex).

### Also in combination with Hydrogen

Besides hydrocarbons, hydrogen can also be an explosive gas. Because sensors based on infrared technology do not warn against hydrogen explosion dangers, the gas detector X-am 5600 combines two sensor signals (Infrared Ex and electrochemical H<sub>2</sub>) for reliable hydrogen detection. The X-am 5600 provides the advantages of poison-free technology to be used in areas where, until now, only catalytic Ex sensors have been used.

### Various monitoring possibilities

Thanks to the combination of innovative infrared technology and the latest electrochemical Dräger XXS miniature sensors, this 1-to-6 gas detector reliably detects explosive, combustible and harmful concentrations of O<sub>2</sub>, Cl<sub>2</sub>, CO, CO<sub>2</sub>, H<sub>2</sub>, H<sub>2</sub>S, HCN, NH<sub>3</sub>, NO, NO<sub>2</sub>, PH<sub>3</sub>, SO<sub>2</sub>, O<sub>3</sub>, Amine, Odorant, COCl<sub>2</sub> and organic vapors. With the PC software Dräger CC-Vision, the sensors can easily be exchanged, calibrated or converted to meet the needs of different applications.

#### Flexible use

An optional external pump which can be operated with hoses up to 30 m or 98 ft. in length is the perfect solution for pre-entry measurements in tanks or pipelines. To monitor entire areas, the gas detector X-am 5600 can be used in combination with the innovative air monitor Dräger X-zone 5000.

## **Benefits**

### Suitable for Ex-Zone 0

The small and reliable gas detector is suitable for use in areas classified as zone 0, which are areas where explosive atmospheres are always to be expected.

## Area monitoring

In combination with the Dräger X-zone 5000 the gas detector can be used for various area monitoring applications. Up to 25 Dräger X-zone 5000 units can be automatically interconnected to form a wireless fenceline. This interconnection of the area monitoring devices allows for the fast securing of larger areas, e.g. pipelines or industrial tanks – even within the scope of industrial shutdowns.

## 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.

# System components



## Dräger X-dock® 5300/6300/6600

The Dräger X-dock® 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.

## Accessories



## Power pack & charging set

NiMH supply unit T4 with charger module und power pack



Power pack with connection cable (for worldwide use)

for up to 20 charger modules

## Accessories



### Calibration cradle



## 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.

## Related Products



## Dräger X-am® 5000

The Dräger X-am® 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  $\rm O_2$  and harmful concentrations of toxic gases, organic vapors, Odorant and Amine.

## **Related Products**



## Dräger X-am® 7000

Dräger X-am® 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 × H × D)	47 × 130 × 44 mm; 1.85 × 5.12 × 1.73 inc	hes		
Weight	250 g; 8.8 oz.			
Ambient conditions	Temperature	- 20 to + 50 °C; - 4 to + 122 °F		
	Pressure	700 to 1300 mbar; 20.7 to 38.4 inch Hg		
	Humidity	10 to 95 % RH		
Alarms	Visual	360°		
	Audible	Multi-tone > 90 dB at 30 cm; 1 ft.		
	Vibration			
Ingress Protection	IP 67			
Operating time	~ 9 h or rather ~ 10.5 h			
Charging time	< 4 hours			
Data logger	Can be read out via Infrared > 1000 hours			
	with 6 gases and a recording interval of 1 value per minute			
Pump operation	Maximum hose length 30 m; 98 ft.			
Approvals	ATEX	I M1 Ex ia I Ma		
		II 1G Ex ia IIC T4/T3 Ga		
	Measurement performance certificate	EN 50104 (2002) + A1 (2004) O <sub>2</sub>		
		EN 45544 CO, CO <sub>2</sub> and H <sub>2</sub> S		
		EN 60079-29-1:2007 Methane, Propane,		
		Nonane		
		EN 50271:2001 Software and documentation		
	IEC	Ex ia I Ma		
		Ex ia IIC T4/T3 Ga for MQG 01"		
	MED	Marine Equipment Directive 96/98/EC		
	CSA C US	Div.1, Class I, Groups A,B,C,D T4/T3		
		A/Ex ia IIC T4/T3 /Ga		

# Ordering Information

## Dräger X-am® 5600

83 21 050

Consisting of: basic instrument with an integrated data logger, support CD, manufacturer's and calibration certificates. A functional instrument must include up to 4 sensors and a power supply unit.

Infrared-Sensors	Measuring Range	Resolution	Response time (t₀)	Order code
DrägerSensor Dual IR Ex/	0 – 100 % LEL	1 % LEL	Ex: 15 sec.	68 11 960
CO <sub>2</sub> 1)	0 - 100 Vol% Methane,	0.1 Vol% CH₄	CO <sub>2</sub> : 31 sec.	_
	Propane, Ethylene			
	0 – 5 Vol% CO <sub>2</sub>	0.01 Vol% CO <sub>2</sub>		_
DrägerSensor IR Ex <sup>1)</sup>	0 - 100 % LEL	1 % LEL	15 sec.	68 12 180
	0 - 100 Vol% Methane,	0.1 Vol% CH <sub>4</sub>		
	Propane, Ethylene			
DrägerSensor IR CO <sub>2</sub>	0 - 5 Vol% CO <sub>2</sub>	0.01 Vol% CO <sub>2</sub>	31 sec.	68 12 190
Electrochemical Sensors	Measuring Range	Resolution	Response time (t <sub>90</sub> )	Order Code
DrägerSensor XXS O <sub>2</sub>	0 – 25 Vol%	0.1 Vol%	10 sec.	68 10 881
DrägerSensor XXS CO	0 – 2,000 ppm	2 ppm	25 sec.	68 10 882
DrägerSensor XXS O <sub>2</sub>	0 - 100 Vol%	0.5 Vol%	5 sec.	68 12 385

# Ordering Information

DrägerSensor XXS CO HC	0 – 10,000 ppm	5 ppm		25 sec.	68 12 010	
DrägerSensor XXS CO/	0 – 2,000 ppm CO	2 ppm		25 sec.	68 11 950	
DrägerSensor XXS H <sub>2</sub> S	0 – 200 ppm	1 ppm		15 sec.	68 10 883	
DrägerSensor XXS H <sub>2</sub> S	0 – 100 ppm	0.1 ppm		15 sec.	68 11 525	
DrägerSensor XXS H <sub>2</sub> S	0 – 1,000 ppm	2 ppm		15 sec.	68 12 015	
DrägerSensor XXS CO/	0 - 2,000 ppm CO / 0 - 200 ppm H <sub>2</sub> S	1 ppm H <sub>2</sub> S	/ 2 ppm CO	20 sec.	68 11 410	
DrägerSensor XXS NO	0 – 200 ppm	0.1 ppm		10 sec.	68 11 545	
DrägerSensor XXS NO <sub>2</sub>	0 – 50 ppm	0.1 ppm		15 sec.	68 10 884	
DrägerSensor XXS SO <sub>2</sub>	0 – 100 ppm	0.1 ppm		15 sec.	68 10 885	
DrägerSensor XXS PH₃	0 – 20 ppm	0.01 ppm		10 sec.	68 10 886	
DrägerSensor XXS PH <sub>3</sub>	0 – 2,000 ppm	1 ppm		10 sec.	68 12 020	
HC	, 11	• • •				
DrägerSensor XXS HCN	0 - 50 ppm	0.1 ppm		10 sec. (t <sub>50</sub> )	68 10 887	
DrägerSensor XXS NH₃	0 – 300 ppm	1 ppm		10 sec. (t <sub>50</sub> )	68 10 888	
DrägerSensor XXS CO <sub>2</sub>	0 - 5 Vol%	0.1 Vol%		30 sec. (t <sub>50</sub> )	68 10 889	
DrägerSensor XXS Cl <sub>2</sub>	0 – 20 ppm	0.05 ppm		30 sec.	68 10 890	
DrägerSensor XXS H <sub>2</sub>	0 – 2,000 ppm	5 ppm		10 sec.	68 12 370	
DrägerSensor XXS H <sub>2</sub> HC	0 – 4 Vol%	0.01 Vol%		20 sec.	68 12 025	
DrägerSensor XXS OV	0 – 200 ppm	0.5 ppm		20 sec. (t <sub>50</sub> )	68 11 530	
DrägerSensor XXS OV-A	0 – 200 ppm	1 ppm		40 sec. (t <sub>50</sub> )	68 11 535	
DrägerSensor XXS Amine	0 – 100 ppm	1 ppm		30 sec.	68 12 545	
DrägerSensorXXS Odorant	0 – 40 ppm	0.5 ppm		90 sec.	68 12 535	
DrägerSensorXXS COCl <sub>2</sub>	0 – 10 ppm	0.01ppm		20 sec.	68 12 005	
DrägerSensor XXS Ozone	0 – 10 ppm	0.01 ppm		10 sec. (t <sub>50</sub> )	68 11 540	
Electrochemical Sensors with 5 years warranty						
DrägerSensor XXS E CO	0 - 2,000 ppm	2 ppm		15 sec.	68 12 212	
DrägerSensor XXS E H₂S	0 – 200 ppm	1 ppm		15 sec.	68 12 213	
DrägerSensor XXS E O <sub>2</sub>	0 – 25 Vol%	0.1 Vol%		10 sec.	68 12 211	
<sup>1)</sup> Special calibration for Ex sensors are available (standard setting: methane)						
Power supply units						
NiMH power supply T4			83 18 704			
NiMH power supply T4 high capacity			83 22 244			
Power pack & charging set consisting of: rechargeable NiMH			83 18 785			
power supply T4, charging worldwide use)	module and a single charg	ger (for				
Power pack & charging se	eable NiMH	83 22 785				
power supply HC T4, charging module and a single charger (for						
worldwide use)						
Battery holder ABT 0100 (without batteries)			83 22 237			
Alkaline batteries T3 (2 pcs.) for battery holder 83 22 237			83 22 239			

# Ordering Information

Alkaline batteries T4 (2 pcs.) for battery holder 83 22 237	83 22 240		
Charging accessories			
Charging module	83 18 639		
Charging set basic, consisting of one charging module and a single	83 20 333		
power supply (worldwide use)			
Power supply with connection cable (worldwide use) for max. 20	83 15 805		
charging modules			
Single charger (worldwide use) for max. 5 charger modules	83 16 994		
Single charger (worldwide use) for max. 2 charger modules	83 15 635		
Car charging connection cabel 12 V / 24 V for a charging module	45 30 057		
Vehicle charger mounting kit for one Dräger X-am® 1/2/5x00	83 18 779		
charging module			
Pump accessories			
Dräger X-am® 1/2/5x00 external pump	83 19 400		
Hand pump adapter	83 19 195		
Confined space entry set, with an external pump and 3 m or 9 ft.	83 19 399		
hose	03 19 399		
Carrying case Dräger X-am® 1/2/5x00 external pump (without	83 19 385		
pump)	00 10 000		
<u> </u>			
Calibration accessories			
Calibration cradle	83 18 752		
Dräger X-dock 5300 for Dräger X-am® 1/2/5x00	83 21 880		
Dräger Bump Test Station for Dräger X-am® 5600, not including	83 19 131		
gas cylinder			
Dräger Bump Test Station for Dräger X-am® 5600, complete with	83 19 130		
one test gas cylinder 58L (gas and concentration variable)			
Nonane Checker	83 20 080		
Communication accessories	Order code		
Dräger GasVision	83 14 034		
Dräger CC-Vision	Freeware		
USB DIRA with USB cable, communication adapter infrared to	83 17 409		
USB	00 11 100		
System components			
Dräger X-zone® 5000 – 868 MHz, 12 Ah	83 20 740		
Dräger X-zone® 5000 – 868 MHz, 24 Ah	83 20 741		
Dräger X-zone® 5000 – 868 MHz, 12 Ah with pump	83 20 742		
Dräger X-zone® 5000 – 868 MHz, 24 Ah with pump	83 20 743		
In conjunction with the portable alarm amplifier Dräger X-zone® 500	the units are combined to a new system; to monitor whole working		
areas or to connect to external alarm contacts.			

## Notes

Dräger Marine & Offshore Beurtschipperstraat 1 3194 DK Hoogvliet +31 (0)10 295 2740 sales-mo.sd.nl@draeger.com www.draeger-mo.com



## CORPORATE HEADQUARTERS

Drägerwerk AG & Co. KGaA Moislinger Allee 53–55 23558 Lübeck, Germany www.draeger.com

#### MANUFACTURER

Dräger Safety AG & Co. KGaA Revalstraße 1 23560 Lübeck, Germany

# REGION EUROPE CENTRAL AND EUROPE NORTH

Dräger Safety AG & Co. KGaA Revalstraße 1 23560 Lübeck, Germany Tel +49 461 882 0 Fax +49 461 882 2080 info@draeger.com

#### REGION EUROPE SOUTH

Dräger Safety France SAS 25, rue Georges Besse 92182 Antony Cedex Tel +33 1 46 11 56 00 Fax +33 1 40 96 97 20 europe.south@draeger.com

#### REGION MIDDLE EAST, AFRICA

Dräger Safety AG & Co. KGaA Branch Office P.O. Box 505108 Dubai, United Arab Emirates Tel +971 4 4294 600 Fax +971 4 4294 699 contactuae@draeger.com

#### REGION ASIA PACIFIC

Draeger Safety Asia Ptc Ltd
25 International Business Park
#04-20/21 German Centre
Singapore 609916
Tel +65 6308 9400
Fax +65 6308 9401
asia.pacific@draeger.com

# REGION CENTRAL AND SOUTH AMERICA

Dräger Panama S. de R.L. Complejo Business Park, V tower, 10th floor Panama City Tel +507 377 9100 Fax +507 377 9130 contactcsa@draeger.com

Locate your Regional Sales Representative at: www.draeger.com/contact

