# Dräger

# 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.



# SMALL YET ROBUST

Small, light and easy to use - the robust and water-tight Dräger 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 new Dräger infrared sensors can be used for the measurement of explosive substances or  $CO_2$ : The infrared sensor IR Ex allows the measurement of explosive, combustible hydrocarbons in the range of the lower explosive limit. With this sensor, measurements in the range of 0-100 Vol.-% for methane, propane and ethylene are also possible. The infrared sensor IR  $CO_2$ , 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 Dräger 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>, Amine, Odorant, COCl<sub>2</sub> and organic vapors. With the PC software



Dräger X-am<sup>®</sup> 5600 Small, light and tough for single-handed detection of up to 6 gases.

Dräger CC-Vision, the sensors can easily be exchanged, calibrated or converted to meet the needs of different applications.

#### FLEXIBLE USE

This small gas detection instrument is perfectly suited as a personal monitor. The simple two-button control panel allows for the intuitive use of the device. The gas inlets – on the upper and front side – provide optimal measurement accuracy even if they are inadvertently placed in a pocket or a gas inlet is covered. 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 Dräger X-am 5600 can be used in combination with the innovative Dräger X-zone 5000.

#### 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.

#### SIMPLE SOLUTION FOR BUMP TESTS

Simple, quick, and professional: From bump testing to complete documentation, users can choose from a range of practical, on-site solutions for optimal safety in every application. Both the Dräger E-Cal automatic test and calibration station and the Dräger Bump Test Station are ideal system extensions that save costs and time.



#### ORDER INFORMATION

Dräger X-am 5600				83 21 050
Consisting of: basic instrument with an i	integrated data logger, support CD, manufacturer's a	and calibration certificates.		
A functional instrument must include up	to 4 sensors and a power supply unit.			
			Response	
Infrared-Sensors	Measuring Range	Resolution	time (t <sub>90</sub> )	Order code
DrägerSensor Dual IR Ex/CO <sub>2</sub> 1)	0 – 100 % LEL	1 % LEL	20 sec.	68 11 960
	0 – 100 Vol% Methane, Propane, Ethylene	0.1 Vol% CH <sub>4</sub>		
	0 – 5 Vol% CO <sub>2</sub>	0.01 Vol% CO2		
DrägerSensor IR Ex <sup>1)</sup>	0 – 100 % LEL	1 % LEL	20 sec.	68 12 180
	0 – 100 Vol% Methane, Propane, Ethylene	0.1 Vol% CH <sub>4</sub>		
DrägerSensor IR CO <sub>2</sub>	0 – 5 Vol% CO <sub>2</sub>	0.01 Vol% CO <sub>2</sub>	20 sec.	68 12 190

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# ORDER INFORMATION

Electrochemical Sensors	Measuring Range	Resolution	Response time (t90)	Order Code
DrägerSensor XXS O <sub>2</sub>	0 – 25 Vol%	0.1 Vol%	10 sec.	68 10 881
DrägerSensor XXS CO	<u>0 – 2,000 ppm</u>	2 ppm	15 sec.	68 10 882
DrägerSensor XXS O <sub>2</sub> 100	<u>0 - 100 Vol%</u>	0.5 Vol%	5 sec.	68 12 385
DrägerSensor XXS CO HC	0 – 10,000 ppm	5 ppm	25 sec.	68 12 010
DrägerSensor XXS CO/H <sub>2</sub> compensated	<u>0 – 2,000 ppm CO</u>	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 LC	0 – 100 ppm	0.1 ppm	15 sec.	68 11 525
DrägerSensor XXS H <sub>2</sub> S HC	0 – 1,000 ppm	2 ppm	15 sec.	68 12 015
DrägerSensor XXS CO/H <sub>2</sub> S	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 PH <sub>3</sub>	0 – 20 ppm	0.01 ppm	10 sec.	68 10 886
DrägerSensor XXS PH₃ HC	0 – 2,000 ppm	1 ppm	10 sec.	68 12 020
DrägerSensor XXS HCN	0 – 50 ppm	0.1 ppm	10 sec. (t <sub>50</sub> )	68 10 887
DrägerSensor XXS NH <sub>3</sub>	0 – 300 ppm	1 ppm	20 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
DrägerSensor XXS Odorant	<u>0 – 40 ppm</u>	0.5 ppm	90 sec.	68 12 535
DrägerSensor XXS COCl <sub>2</sub>	<u>0 – 10 ppm</u>	0.01 ppm	30 sec.	68 12 005
Electrochemical Sensors with 5 years warr	ranty			
DrägerSensor XXS E CO	0 – 2 000 ppm		15 890	68 12 212

DrägerSensor XXS E CO	0 – 2,000 ppm	2 ppm	15 sec.	68 12 212
DrägerSensor XXS E H <sub>2</sub> S	<u>0 – 200 ppm</u>	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 pack T4	83 18 704
NiMH power pack T4 high capacity	83 22 244
Power pack & charging set consisting of: rechargeable NiMH power supply T4, charging module and a single charger (for worldwide use)	83 18 785
Alkaline power pack T3/T4 (without alkaline batteries)	83 22 237
Alkaline batteries T3 (2 pcs.) for alkaline power supply 83 22 237	83 22 239

# Charging accessories

Charging module	83 18 639
Charging set basic, consisting of one charging module and a single power supply (worldwide use)	83 20 333
Power supply with connection cable (worldwide use) for max. 20 charging modules	83 15 805
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 12V/24 V for a charging module	45 30 057
Vehicle charger mounting kit for one Dräger X-am 5600 charging module	83 18 779

Pump accessories

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. viton hose	83 19 399
Carrying case Dräger X-am 1/2/5x00 external pump (without pump)	83 19 385

Calibration accessories

Calibration cradle	83 18 752
Dräger E-Cal module for Dräger X-am 5600	83 18 754
Dräger Bump Test Station for Dräger X-am 5600, not including gas cylinder	83 19 131
Dräger Bump Test Station for Dräger X-am 5600, complete	83 19 130
with one test gas cylinder 58L (gas and concentration variable)	
Printerset for Dräger Bump Test Station consisting of: Dräger Mobile Printer,	83 21 011
single charger, rechargeable NiMH batteries, USB connection cable, positioning aid	
Nonane Checker	83 20 080

Communication accessories	Order code
Dräger GasVision	83 14 034
Dräger CC-Vision	64 08 515
USB DIRA with USB cable, communication adapter infrared to USB	83 17 409
PC communication set 1 with USB port, Dräger CC-Vision incl. registration software	83 18 761
PC communication set 2 with USB port, Dräger CC-Vision incl. registration software and barcode reader	83 18 762

#### System components

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 MHz1 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 5000 the units are combined to a new system; to monitor whole working areas	

or to connect to external alarm contacts.

# **TECHNICAL DATA**

Dimensions (W x H x D)	47 x 130 x 44 mm; 1.85 x 5.12 x 1.73 inches		
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	~10 h or rather ~12 h		
Charging time	< 4 hours		
Data logger	Can be read out via Infrared > 1000 hours		
	with 6 gases and a recording interval of	<sup>1</sup> 1 value per minute	
Pump operation	Maximum hose length 30 m; 98 ft.		
Approvals	ATEX	IM1 Ex ia IMa	
		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	

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