

# Dräger X-am<sup>®</sup> 7000 Multi-Gas Detection

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.



# **Benefits**

#### Flexibility through sensor variety

The extensive portfolio of over 25 different DrägerSensors enables the detection of more than 100 gases and vapors. The Dräger X-am 7000 can be equipped with three electrochemical, and two catalytic bead, infrared or photo ionization sensors. During operation, it is also possible with the catalytic-Ex sensor to change the gas being measuring or the measurement range of the sensor. In this way, the instrument can be easily adapted to various applications. DrägerSensors are renowned for their fast response time, minor cross sensitivities, high level of accuracy and long lifetimes.

### Intelligent and interchangeable sensors

In addition to the electrochemical sensors, the catalytic, infrared and photo ionization sensors are automatically recognized by the instrument upon insertion. All sensors are pre-calibrated, and therefore a reconfiguration of the Dräger X-am 7000 can be done by simply changing the sensor. No additional service or maintenance is necessary.

#### Poison resistant Ex-sensor

Advanced safety in explosive atmospheres: thanks to the high sensitivity of the innovative Ex-sensor to combustible organic vapors the Dräger X-am 7000 warns reliable of danger of explosions. It not only responds quickly to combustible gases and vapours, it is also characterised by its high resistance against silicone and hydrogen sulphide contamination. In combination with the high degree of drift stability, this resistance enables an extraordinarily long service life of more than four years. This will reduce your operational costs.

### Robust and watertight

In addition to the built-in dust and water filter, the Dräger X-am 7000 can be submersed in up to 1 m or 3 ft. of water without damage. A specially designed rubber boot protects the instrument against damage even from a drop of 1.5 m or 5 ft.

## **Built for longevity**

The completely new design of the rechargeable battery pack with intelligent chargingmanagement guarantees full functionality of the instrument over a period of up to 20 hours. An alkaline battery pack is also available. The DrägerSensors used in the Dräger X-am 7000 have a typical lifetime of over 5 years. If, over time, a sensor exchange is necessary, the modular approach of the instrument allows for this in a few simple steps.

### Multiple alarms

Alarm conditions can not be ignored because of the extremely loud multi-tone horn. In addition, the visual alarm can be seen 360°, ensuring that the user notices the warning. By generating an optional life-signal every six seconds, the Dräger X-am 7000 confirms that it is functioning properly.

# **Benefits**

#### Integrated pump

A built-in high-performance pump draws in the gas to be measured through a hose of up to 45 m length. The pump is continuously monitored for blockages.

### Easy detection of leakages

A flexible "gooseneck" probe eases the search for leakages on pipelines, valves, flanges, etc. In the tracking-mode, the instrument generates an increasing or decreasing rate of beeps, depending on the gas concentration detected.

### Information at one glance

The large graphic display and the auto-zoom function during alarms guarantee an easy recognition of the measurement values and symbols displayed for immediate reaction to the situation or hazards. All information is provided in plain text for easy understanding.

### Intuitive software functions

The software menu within the Dräger X-am 7000 was designed in partnership with our customers making it simple and easy to use. With the help of Dräger CC-Vision software, up to five different detection applications can be saved within the instrument. By doing so, the use of different instrument configurations can be set for that specific application. During operation, a simple change between these set parameters can be done via the instrument's menu.

#### Data management

An integrated data logger logs up to 3000 sets of values – that equals 100 hours when recording one set per minute. The data can then be transferred to and evaluated on a PC using an infrared interface together with the Dräger GasVision software package.

# System components



### DrägerSensor XS

DrägerSensors XS are ahead of the field thanks to their high reliability and warranty periods of up to 5 years. Dräger's smart technology allows simple sensor installation and switching using the plug-and-play technology.



### **Dräger Catalytic Ex-Sensors**

Multiple gases at the same time: The DrägerSensor Cat Ex measures combustible gases and vapors in the air.



### **PID** sensors

Be on the safe side: Many explosive hazardous substances are toxic for humans, at levels markedly below the LEL (Lower Explosive Limit) and cannot be detected at these levels by using only catalytic sensors. Reliable detection of such substances in the ppm range is accomplished using photoionization detectors (PIDs).



## **Dräger Infrared Sensors**

Compact and powerful: The durable Dräger infrared sensors work very accurately and precisely, even in oxygen-free atmospheres and they also have an excellent cost of ownership.

# 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



# Rechargeable power pack NiMH



Alkaline power pack (without alkaline batteries)

1000

# Accessories



# **Charging module**



Leather carrying case



# **Power Supply**

For up to eight charging modules



# Car mounting kit

# 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  $O_2$  and harmful concentrations of toxic gases, organic vapors, Odorant and Amine.



# Dräger X-am® 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.

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# Technical Data

Dimensions (W x H x D)	150 x 140 x 75 mm; 5.9 x 5.6 x 3	in.	
Weight	Instrument	600 g; 21 oz.	
	Rechargeable battery	490 g; 17 oz. (3.0 Ah)	
		730 g; 26 oz. (6.0 Ah)	
Ambient conditions	Temperature	-20 to +55 °C, short-term -40 to +60 °C	
		-5 to +105 °F, short-term -40 to +130 °F	
	Pressure	700 to 1300 hPa	
	Humidity	10 to 95 % r.h.	
Ingress protection	IP 67		
Battery life	NiMH (4.8 V / 3.0 Ah)	> 9 hours	
	NiMH (4.8 V / 6.0 Ah)	> 20 hours	
	Alkaline	> 20 hours	
Alarms	Visual 360° flashing LEDs, audible alarm (> 100 dB at 30 cm or 1 ft.)		
Charging time	3.5 to 7 hours, depending on battery type		
Pump mode	Maximum hose length of 45 m; 150 ft.		
Approvals	ATEX	II 2G Ex d ia IIC T4 Gb	
		- 20 ≤ Ta ≤ +60 °C (NiMH)	
		- 20 ≤ Ta ≤ +40 °C (Alkaline)	
		I M2 Ex d ia I Mb	
		BVS 03 ATEX E 371 X	
		Measurement performance certificate	
		according to:	
		EN 50271:2001	
		EN 60079-29-1 (for the CatEx sensors from	
		methane to nonane and infrared sensors)	
		EN 45544-1 + 2 (CO, H <sub>2</sub> S, CO <sub>2</sub> )	
		EN 50101 (O <sub>2</sub> )	
	MED	Marine Equipment Directive 96/98/EC	
	UL	Class I, Div 1, Group A, B, C, D Temp.	
		code T4	
		- 20 ≤ Ta ≤ + 60 °C (NiMH)	
		- 20 ≤ Ta ≤ + 40 °C (Alkaline)	
	CSA	Class I, Div 1, Group A, B, C, D Temp.	
		code T4	
		- 20 ≤ Ta ≤ + 60 °C (NiMH)	
		- 20 ≤ Ta ≤ + 40 °C (Alkaline)	
	IECEx	Ex d ia IIC T4 Gb	
		- 20 ≤ Ta ≤ + 60 °C (NiMH)	
		- 20 ≤ Ta ≤ + 40 °C (Alkaline) Ex d ia I Mb	
	CE-mark	Electromagnetic compatibility (directive	
		2004/108/EG)	

# Ordering Information

Description	Order code	
Dräger X-am® 7000, basic unit including a calibration adapter,	83 17 400	
water- and dust-filter		
In order to receive a fully operational unit, a power pack and up		
to 5 sensors have to be ordered. An optional, integrated pump or		
data logger can also be included.		

# Ordering Information

Power supply units			
Rechargeable power pack NiMH 4.8 V / 3.0 Ah		83 17 408	
Rechargeable power pack NiMH 4.8 V / 6.0 Ah		83 17 454	
Alkaline power pack		83 17 550	
Alkaline batteries (4 pcs.)		83 17 447	
Charging accessories			
Charging module		83 16 487	
Power supply for up to eight charging modules		83 15 805	
Power supply for one charging module		83 15 635	
Power supply for up to two charging modules		83 16 994	
Power supply for vehicles		83 12 645	
Car mounting kit		83 18 169	
Description	Measuring range		Order code
Infrared Sensors			
DrägerSensor Smart IR Ex	0 – 100 %LEL		68 10 460
	0 - 100 Vol% CH	4	
DrägerSensor Smart IR CO <sub>2</sub>	0 – 5 Vol%		68 10 590
DrägerSensor Smart IR CO <sub>2</sub> HC	0 – 100 Vol%		68 10 599
Catalytic Bead Sensors			
DrägerSensor Smart CatEx PR	0 – 100 % LEL		68 12 970
DrägerSensor Smart CatEx HC PR	0 – 100 % LEL		68 12 980
	0 - 100 Vol% CH <sub>4</sub>		
DrägerSensor Smart CatEx FR PR	0 – 100 % LEL		68 12 975
	0 – 100 Vol% CH <sub>4</sub>		
PID Sensor			
DrägerSensor Smart PID	0 – 2,000 ppm		83 19 100
Electrochemical Sensors			
DrägerSensor XS 2 CO	0 – 2,000 ppm		68 10 365
DrägerSensor XS EC CO	0 – 2,000 ppm		68 09 105
DrägerSensor XS R CO	0 - 2,000 ppm		68 10 258
DrägerSensor XS EC CO HC	0 – 10,000 ppm		68 09 120
DrägerSensor XS 2 H <sub>2</sub> S	0 – 100 ppm		68 10 370
DrägerSensor XS 2 H₂S SR	0 – 100 ppm		68 10 575
DrägerSensor XS EC H₂S 100	0 – 100 ppm		68 09 110
DrägerSensor XS EC H <sub>2</sub> S HC	0 – 1,000 ppm		68 09 180
DrägerSensor XS R H₂S	0 – 100 ppm		68 10 260
DrägerSensor XS 2 O <sub>2</sub>	0 – 25 Vol%		68 10 375
DrägerSensor XS EC O <sub>2</sub> 100	0 – 100 Vol%		68 09 550
DrägerSensor XS EC O <sub>2</sub> LS	0 – 25 Vol%		68 09 130
DrägerSensor XS R O <sub>2</sub>	0 – 25 Vol%		68 10 262
DrägerSensor XS EC Amine	0 – 100 ppm		68 09 545
DrägerSensor XS EC Cl <sub>2</sub>	0 – 20 ppm		68 09 165
DrägerSensor XS EC CIO <sub>2</sub>	0 – 20 ppm		68 11 360
DrägerSensor XS EC CO <sub>2</sub>	0 – 5 Vol%		68 09 175
DrägerSensor XS EC COCI <sub>x</sub>	0 – 10 ppm		68 08 582
DrägerSensor XS EC H <sub>2</sub>	0 – 2,000 ppm		68 09 185
DrägerSensor XS EC H <sub>2</sub> HC	0 – 4 Vol-%		68 11 365
	0 – 50 ppm		68 09 150

# **Ordering Information**

DrägerSensor XS EC Hydride	rSensor XS EC Hydride 0 – 20 ppm			
DrägerSensor XS EC NH₃ 0 – 300 ppm		68 09 145		
DrägerSensor XS EC NO 0 – 200 ppm		68 09 125		
DrägerSensor XS EC NO <sub>2</sub>	68 09 155			
DrägerSensor XS EC Odorant	0 – 40 ppm	68 09 200		
DrägerSensor XS EC OV	0 – 200 ppm	68 09 115		
DrägerSensor XS EC OV-A	0 – 100 ppm	68 09 522		
DrägerSensor XS EC PH₃ HC	0 – 1,000 ppm	68 09 535		
DrägerSensor XS EC SO <sub>2</sub>	0 – 100 ppm	68 09 160		
Calibration and Communication Accessories				
Calibration adapter		83 17 656		
Sensor extension cable for the calibration with vapors		83 17 970		
Dräger X-am <sup>®</sup> 7000 E-Cal Module		83 17 705		
Dräger Bump Test Station for Dräger X-am® 7000		83 19 072		
Complete with one test gas cylinder 58 L (gas and concentration variable)				
Dräger Bump Test Station for Dräger X-am® 7000, not including gas cylinder		83 18 909		
Printer Set for Dräger Bump Test Station Dräger X-am® 7000		83 21 009		
Consisting of: Dräger Bump Test Station, Dräger Mobile Printer, single charger,				
rechargeable NiMH batteries, USB connection cable, positioning aid, Dräger CC-Vision				
(not including gas cylinder)				
Printer Set for Dräger Bump Test Station Dräger X-am® 7000 (same contents as 83 21		83 21 020		
009), Complete with one test gas cylinder 5				
Dräger GasVision		83 14 034		
Dräger CC-Vision		Freeware		

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