



Dräger Gas Detection

The Dräger X-am 2000 represents a new generation of personal gas detectors.

DRÄGER X-AM 2000

The Dräger X-am 2000 represents a new generation of personal gas detectors which have been specially designed for personal monitoring. These gas detectors reliably measure combustible gases and vapors, as well as O₂, CO and H₂S. Their ergonomic design, mobile phone dimensions and light weight make them the perfect companion in your daily work. Reliable measurement technology, long sensor life and easy operation guarantee maximum safety at an extremely low cost of ownership.

The instrument's light weight and mobile phone size – unique in today's market – guarantees users a high level of comfort and convenience. By design, the instruments are easy to use, thanks to the practical two button control panel and easy to understand display icons.

The Dräger X-am 2000 is available in 1 to 4 gas configurations with a 1000 hour data logger. This monitor is not life limited and has user replaceable sensors, unmatched for a monitor of this type. The optional T4 NiMH battery pack will be covered by a two-year warranty.

The new bump-test station will allow for complete function tests in about 20 seconds. Automatic recognition of the monitor starts the process as soon as the monitor is placed in the cradle. The monitor can also be configured to automatically perform a complete calibration when placed in the test station. Records of the tests are stored in the instrument's data or event logger.

The Dräger E-Cal automatic test, calibration, and documentation system is also an ideal complement to the instrument, saving time and minimizing the workload.

For improved safety when facing unknown gas hazards the catalytic EX sensor, calibrated to methane, responds quickly to explosive gases. It also offers a high level of sensitivity to combustible organic vapors, thus providing dependable warnings in the event of explosive hazards.

Dräger-Sensors® stand for innovative technology at the highest level. The Dräger X-am monitors feature the latest series of powerful electrochemical Dräger-Sensors® from the miniaturize XXS generation.

The Dräger X-am 2000 monitor is tough: water and dust resistant to IP 67, the instruments remain fully functional and ready for use even after being dropped in water. The integrated rubber protection and shockproof sensors ensure additional resistance to impact and vibration. The Dräger X-am 2000 also has certified protection against electromagnetic and RFI interference.



Dräger X-am 2000: The ideal 4-gas detector for industrial shutdowns.



TECHNICAL DATA

Gases Detected	Combustible Gases, O ₂ , CO and H ₂ S.	
Dimensions	1.85 x 5.08 x 1.22 inch (7 x 129 x 31 mm)	
Weight	7.8 oz (220 g)	
Approvals	ATEX	II 2G EEx ia d IIC T4/T3 - I M2 EEx ia d I
	UL	Cl. I Div. 1 Group A,B,C,D - Cl. II E,F,G T.-Code T4/T3
	CSA	Cl. I Div. 1 Group A,B,C,D T.-Code T4/T3
	IECEX	Ex ia d I/IIC T4/T3
	CE-mark	Electromagnetic compatibility (directive 89/336/EEC)
	MSHA	X-am 2000 permissible gas detector

ORDER INFORMATION

Dräger X-am 2000 Monitor - unlimited life with data logger - 3 Year Warranty*

Dräger X-am 2000 EX, O ₂ , CO, H ₂ S w/ alkaline battery pack	83 18 910
Dräger X-am 2000 EX, O ₂ , H ₂ S w/ alkaline battery pack	83 18 890
Dräger X-am 2000 EX, O ₂ , CO w/ alkaline battery pack	83 18 880
Dräger X-am 2000, O ₂ , H ₂ S w/ alkaline battery pack	83 18 698
Dräger X-am 2000, O ₂ , CO w/ alkaline battery pack	83 18 697
Dräger X-am 2000, CO, H ₂ S w/ alkaline battery pack	83 18 696
Dräger X-am 2000 EX, CO w/ alkaline battery pack	83 18 790
Dräger X-am 2000 EX, H ₂ S w/ alkaline battery pack	83 18 780
Dräger X-am 2000 EX, O ₂ w/ alkaline battery pack	83 18 770
Dräger X-am 2000 EX w/ alkaline battery pack	83 18 750
Dräger X-am 2000 O ₂ , CO, H ₂ S w/ alkaline battery pack	83 18 699
X-am 2000 Ex/O ₂ /CO/H ₂ S NiMH, w/ Charger Kit	45 43 095
X-am 2000 Ex/O ₂ /H ₂ S, NiMH, w/ Charger Kit	45 43 907
X-am 2000 Ex/O ₂ /CO NiMH, w/ Charger Kit	45 43 908
X-am 2000 Ex/CO NiMH, w/ Charger Kit	45 43 910
X-am 2000 Ex/H ₂ S NiMH, w/ Charger Kit	45 43 911
X-am 2000 Ex/O ₂ NiMH, w/ Charger Kit	45 43 912
X-am 2000 Ex NiMH, w/ Charger Kit	45 43 913

Accessories

NiMH battery pack T4	83 18 704
NiMH battery pack T4 with charger module and power pack	83 18 785
Alkaline battery pack T3/T4 (without alkaline batteries)	83 18 703
Alkaline battery for alkaline power supply 8318703	45 88 195

Dräger Bump Test Station for X-am 2000	83 19 131
Mixed gas cylinder, 2.5 vol.-% CH ₄ , 100 ppm CO; 25 ppm H ₂ S, 17 vol.-% O ₂	45 94 655
Deluxe instrument case	45 43 755

*5 Year Warranty on EC Sensors



ST-7461-2005

Dräger X-am 2000:
Robust 1- to 4-gas detector
for personal monitoring.



Dräger X-am 5000

DRÄGER X-AM 5000

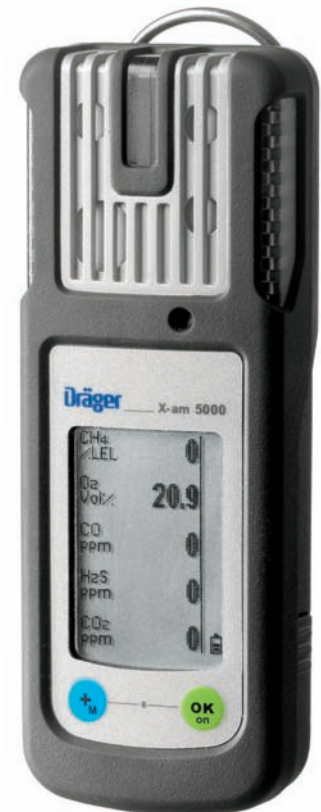
The smallest gas detection instrument for up to 5 gases. The Dräger X-am 5000 belongs to a new generation of gas detectors, developed especially for personal monitoring applications. This 1 to 5-gas detector reliably measures combustible gases and vapors as well as oxygen and harmful concentrations of CO, H₂S, CO₂, Cl₂, HCN, O₃, COCl₂, NH₃, NO₂, PH₃, SO₂, amines, odorants and organic vapors.

A variety of special calibrations for the catalytic Ex sensor allow the Dräger X-am 5000 even more sensitivity when detecting specific combustible gases and vapors. Equipped with durable DrägerSensors® XXS sensor technology, the Dräger X-am 5000 offers maximum security and extremely low operational costs. The longevity of the catalytic sensor and five year expected lifetime of the oxygen sensor are unique in the market.

Dräger X-am 5000's ergonomic mobile phone design and light weight make it comfortable for users to carry. It is water and dust-resistant according to IP 67. The integrated rubber protection and shock-proof sensors ensure additional resistance to impact and vibration.

Moreover, the Dräger X-am 5000 is insensitive to electromagnetic interference. The two button control panel and easy to follow menu system allow for intuitive use. It is easy to exchange, upgrade or calibrate the sensors to other gases. The ability to customize the Dräger X-am 5000's sensors makes more applications possible, including rental equipment.

The innovative catalytic Ex sensor, with full range functionality, measures 0-100 % LEL and 0-100 Vol.-% methane concentration. The calibration concept simplifies a calibration to vapors. When set for maximum sensitivity, the detector is even more reliable to warn about unknown hazards.



TECHNICAL DATA

Dimensions (W x H x D)	1.85 x 5.08 x 1.22 inch (47 x 129 x 31 mm)		
Weight	Approximately 7.8 oz. (220 g)		
Ambient conditions	Temperature	-4 to +122 °F, -20 to +50 °C,	
	Pressure	700 to 1300 mbar, 20.7 to 38.4 inch Hg	
	Humidity	10 to 95% RH	
Alarms	Visual	180°	
	Audible	Multi-tone >90 dB at 30 cm, 1 ft.	
	Vibration		
Battery options	Alkaline, rechargeable NiMH cells for alkaline pack, T4 battery pack		
Operating times	> 12 hours, with pulsed mode > 40 hours		
Charging times	< 4 hours		
Data logger	Can be read out via infrared approx. 1000 hours with 5 gases and a recording interval of 1 reading per minute		
Pump operation	Maximum hose length 98 ft., 30 m.; 30 hours with 3 "AA" alkaline		
Approvals	ATEX	II 2G Ex d ia IIC T4/T3	
		I M2 Ex d ia II	
		Measurement performance certificate according to:	
		- EN 50104 (2002) + A1 (2004)	O ₂
		- EN 45544	CO & H ₂ S
		- EN 60079-29-1:2007	Methane to Nonane
		- EN 50271 1:2001	Software and Documentation
	UL	Class I Div. 1 Group A, B, C, D, E, F, G T-Code T4/T3	
	CSA	Class I, Div. I Group A, B, C, D, T-Code T4/T3	
	IECEX	Ex d ia IIC T4/T3	
CE mark	Electromagnetic compatibility		
MED	Marine Equipment Directive 96/98/EC		
MSHA			

ORDER INFORMATION**CONTACT CUSTOMER SERVICE FOR KIT CONFIGURATIONS (1-800-858-1737)**

Description	Order No.
Dräger X-am 5000, basic instrument without power supply unit, with data logger, with manufacturer's and calibration certificates. Order battery and sensors separately. Contact Dräger for additional sensors for the X-am 5000.	83 20 088
Alkaline power supply with AA batteries (2 required)	83 18 703
Rechargeable NiMH power supply unit T4	83 18 704

Additional power supply units

Battery charging set, consisting of: NiMH power supply unit T4 with charger module and connection cable (for worldwide use) for one charger module	83 18 785
Alkaline batteries (4 pc.) for alkaline power supply	45 88 195



D-9697-2011



D-31850-2011



Dräger X-am 5600

Innovation in the palm of your hand. Dräger X-am 5600 — Unprecedented protection from the market's smallest, infrared-capable, six-gas personal monitor.

SMALLEST DEVICE INCREASES YOUR PRODUCTIVITY BIG TIME

As the smallest device of its type in the industry it is much less obtrusive on the user allowing him to focus on the task at hand. In addition the X-am 5600 can measure up to 6 gases at one time reducing the need for additional instruments.



Size comparison of the X-am 5600 to three of its main competitors

GO EASY ON YOUR BOTTOM LINE WITH REDUCED TOTAL COST OF OWNERSHIP

Dustproof and watertight monitors are only as reliable as their sensors. That's why Dräger starts by engineering its infrared sensors to last up to eight years, keeping total cost of ownership low and instrument uptime high. In fact, Dräger's 5 year warranty on the

IR sensors exceeds the industry average by 60% and there is no need to invest in new or additional equipment because the X-am 5600 works seamlessly with your existing Dräger X-am bump test stations, pumps, and calibration stations

KEEP YOUR TEAMS EVEN SAFER

The new Dräger infrared sensors can be used for the measurement of combustible hydrocarbons or CO₂. For those applications where the reliable measurement of these substances is specifically needed Dräger's dual IR CO₂/EX Sensor performs at its best. The innovative 2-in-1 design provides added protection and versatility by making room for an additional sensor.

PERSONAL MONITORING JUST BECAME CONVENIENT

Single-handed operation feels natural with its hand-held ergonomic design. It's a cinch to operate with a simple, two-button control panel. It maintains uninterrupted accuracy when worn in a pocket with its upper and front side mounted gas inlets. With Dräger, a world leader in gas detection technology and innovation, both bump tests and equipment calibrations are simple, quick, and professionally completed in no time.



D-27784-2009

Dräger X-am® 5600
Designed for durability and reliability—and single-handed detection of up to 6 gases

Innovation in the palm of your hand.

ORDER INFORMATION

Electrochemical Sensors	Measuring Range	Resolution	Response time (t ₉₀)	Order Code
DrägerSensor XXS O ₂	0 – 25 Vol.-%	0.1 Vol.-%	10 sec.	68 10 881
DrägerSensor XXS CO	0 – 2,000 ppm	2 ppm	15 sec.	68 10 882
DrägerSensor XXS CO HC	0 – 10,000 ppm	5 ppm	25 sec.	68 12 010
DrägerSensor XXS CO/H ₂ compensated	0 – 2,000 ppm CO	2 ppm	25 sec.	68 11 950
DrägerSensor XXS H ₂ S	0 – 200 ppm	1 ppm	15 sec.	68 10 883
DrägerSensor XXS H ₂ S LC	0 – 100 ppm	0.1 ppm	15 sec.	68 11 525
DrägerSensor XXS H ₂ S HC	0 – 1,000 ppm	2 ppm	15 sec.	68 12 015
DrägerSensor XXS CO/H ₂ S	0 – 2,000 ppm CO / 0 – 200 ppm H ₂ S	1 ppm H ₂ 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 ₂	0 – 50 ppm	0.1 ppm	15 sec.	68 10 884
DrägerSensor XXS SO ₂	0 – 100 ppm	0.1 ppm	15 sec.	68 10 885
DrägerSensor XXS NO ₂ -LC	0 – 50 ppm	0.02 ppm	15 sec.	68 12 600
DrägerSensor XXS PH ₃	0 – 20 ppm	0.01 ppm	10 sec.	68 10 886
DrägerSensor XXS PH ₃ HC	0 – 2,000 ppm	1 ppm	10 sec.	68 12 020
DrägerSensor XXS HCN	0 – 50 ppm	0.1 ppm	10 sec. (t ₅₀)	68 10 887
DrägerSensor XXS NH ₃	0 – 300 ppm	1 ppm	20 sec. (t ₅₀)	68 10 888
DrägerSensor XXS CO ₂	0 – 5 Vol.-%	0.1 Vol.-%	30 sec. (t ₅₀)	68 10 889
DrägerSensor XXS Cl ₂	0 – 20 ppm	0.05 ppm	30 sec.	68 10 890
DrägerSensor XXS H ₂	0 – 2,000 ppm	5 ppm	10 sec.	68 12 370
DrägerSensor XXS H ₂ HC	0 – 4 Vol.-%	0.01 Vol.-%	20 sec.	68 12 025
DrägerSensor XXS OV	0 – 200 ppm	0.5 ppm	20 sec. (t ₅₀)	68 11 530
DrägerSensor XXS OV-A	0 – 200 ppm	1 ppm	40 sec. (t ₅₀)	68 11 535
DrägerSensor XXS Amine	0 – 100 ppm	1 ppm	30 sec.	68 12 545
DrägerSensor XXS Odorant	0 – 40 ppm	0.5 ppm	90 sec.	68 12 535
DrägerSensor XXS COCl ₂	0 – 10 ppm	0.01 ppm	30 sec.	68 12 005
DrägerSensor XXS O ₃	0 – 10 ppm	0.01 ppm	10 sec. (t ₅₀)	68 11 540
DrägerSensor XXS E CO	0 – 2,000 ppm	2 ppm	15 sec.	68 12 212
DrägerSensor XXS E H ₂ S	0 – 200 ppm	1 ppm	15 sec.	68 12 213
DrägerSensor XXS E O ₂	0 – 25 Vol.-%	0.1 Vol.-%	10 sec.	68 12 211

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® includes registration software	83 18 761
PC communication set 2 with USB port, Dräger CC-Vision® includes registration software and barcode reader	83 18 762

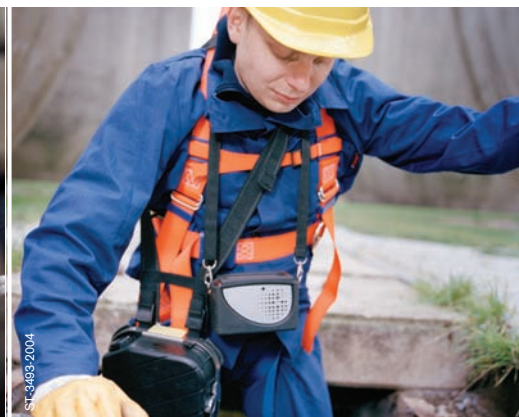
Innovative Measuring for combustible gases



ST-6048-2004



ST-482-2007



ST-3493-2004

Dräger X-am 3000

The Dräger X-am 3000 Monitor is a small and innovative measuring device for Combustible Gases, O₂, CO and H₂S in industrial gas detection applications. Go about your job confidently knowing that the Dräger X-am 3000 will measure and alert you to dangerous gases and vapors.

The most convenient feature of the Dräger X-am 3000 is the optional built-in remote sample pump. Everything is in one package for your confined space applications. Simply attach the pump adapter and hose and you're ready to measure gases in a confined space. Additionally, the small profile of the Dräger X-am 3000 makes it easy to take into a confined space or wear on one's body all day.

The Dräger X-am 3000 is very easy to use. The large display continuously displays the level of gas measured. The three large buttons on the front of the unit turn it ON and OFF, acknowledge alarms, and access frequently required features such as fresh-air calibration. Additional functions and features are accessed through plain text password-protected menus.

Distinctive alarms means that you will always know when a hazardous level of gas is present. The two high intensity visual red alarm lights, a loud audible alarm and a standard vibrating

alarm demand attention, even in high noise areas. Different alarm cadences distinguish between pre and main alarms. The large easy-to-read display quickly indicates the gases measured, their concentrations, and other relevant data to the user. An optional internal datalogger records all of the gas measurements and events for documentation purposes.

The Dräger X-am 3000 may be small in size, but it is designed for use in the most demanding industrial environments. The rugged polymer housing is resistant to many corrosive chemicals as well as the bumps and drops that one may encounter in confined space entry or an industrial environment. All joints and openings are sealed or have gaskets to prevent the ingress of dirt or water. If required, an optional rubber boot provides additional protection to the Dräger X-am 3000.

With the convenient internal sampling pump, the Dräger X-am 3000 is very well suited for confined space entry applications such as those found in the water/waste water industry, petrochemical plants and other applications.

**Dräger X-am® 3000**

Designed for durability and reliability—and single-handed detection of up to 6 gases

TECHNICAL DATA

Gases Detected	Combustible Gases, O ₂ , CO and H ₂ S.
Dimension	3.5 x 5.5 x 2.1 inch (89 x 140 x 55 mm)
Weight	19.4 oz. (550 g)
Approvals	UL: Class I, Division 1, Groups A-D, T4 CSA: Class I, Division 1, Groups A-D, T4 MSHA: permissible gas detector ATEX: EEx iad IIC T4 (-25 to + 55°C)

DRÄGER X-AM 3000 ORDER INFORMATION

The following part numbers include: Instrument w/pump, noted sensors, NiMH battery, battery charger, service tool, calibration and pump adapters, 10 ft. tubing, water-stop filter, calibration gas cylinder, regulator, rubber boot, and carry case.

Dräger X-am 3000 LEL, O ₂ , CO, H ₂ S Confined Space Kit	45 43 721
Dräger X-am 3000 LEL, O ₂ , H ₂ S Confined Space Kit	45 43 720
Dräger X-am 3000 LEL, O ₂ , CO Confined Space Kit	45 43 719
Dräger X-am 3000 LEL, O ₂ Confined Space Kit	45 43 740

The following part numbers include: Instrument, noted sensors, NiMH battery, battery charger, service tool, calibration adapter and instruction manuals. Pump units include pump adapter, 10 ft. tubing and water-stop filter.

Dräger X-am 3000 LEL, O ₂ , CO & H ₂ S with internal pump	45 43 718
Dräger X-am 3000 LEL, O ₂ and H ₂ S with internal pump	45 43 717
Dräger X-am 3000 LEL, O ₂ and CO with internal pump	45 43 716
Dräger X-am 3000 LEL, O ₂ with internal pump	45 43 739
Dräger X-am 3000 LEL, O ₂ , CO, and H ₂ S	45 43 715
Dräger X-am 3000 LEL, O ₂ and H ₂ S	45 43 714
Dräger X-am 3000 LEL, O ₂ and CO	45 43 713
Dräger X-am 3000 LEL, O ₂	45 43 738

Accessories

Alkaline Battery Pack	83 17 716
Internal Datalogger	45 43 625
MSHA Approved Update	45 43 745
Protective Rubber Boot	83 17 727
Leather Carrying Case	45 43 618
Nylon Carrying Case	83 17 720

X-am 3000 is available for rental.



ST-2649-2003



ST-2660-2003



ST-2770-2003

Dräger X-am 7000: Multiple gas measurement capabilities in one compact package.

DRÄGER X-AM 7000

The Dräger X-am 7000 Monitor combines electrochemical (EC), catalytic oxidation (CAT), photo ionization (PID) and infrared (IR) sensing technology for a total of up to 5 sensors. You can choose from over 25 different electrochemical Dräger-Sensors®, 3 different catalytic sensors, a PID Sensor and 3 different IR sensors.

The Dräger X-am 7000 is the smallest gas monitor in the world that can utilize all of these technologies in one compact package. The multiple gas measurement and internal pump capabilities make this unit an ideal choice for confined space entry applications like those found in refineries, chemical plants, utility passage ways, and paper mills.

The Dräger X-am 7000 Monitor has many “strengths”. The strong internal pump can draw gases from well over 150 ft. (45 m). This is useful for deep ship holds, large storage silos or reaction towers in refineries. The integrated rubber boot and strong advanced polymer enclosure of the Dräger X-am 7000 withstands the toughest industrial environments, providing good resistance against dust, RFI interference, rain, and extreme temperatures. Loud audible and bright visual alarms warn the user that hazardous levels of gas are present. The standard NiMH battery pack will last well in excess of an 8-hour shift and the optional high capacity battery will allow operation times of greater than 20 hours.

Another strength of the Dräger X-am 7000 is the optional IR Sensor. The infrared combustible gas (IR-Ex) sensor measures a wide range of hydrocarbons. However, unlike catalytic sensors, the IR

sensor will measure hydrocarbons in inert backgrounds (without oxygen). The IR-Ex is very good at measuring heavier hydrocarbons (like turpentine, kerosene and jet fuels) from ppm to %LEL levels. Gases that poison catalytic sensors such as H₂S, halogenated hydrocarbons, and silicones have no effect on the IR-Ex Sensor making it ideal for industries that make or use these types of compounds. Gases like methane and propane can be measured in ppm, %LEL, and %Vol. measurement ranges (with the same instrument), which make the X-am 7000 well suited for the natural gas industry.

The IR-CO₂ sensor makes the X-am 7000 the ideal choice for breweries, carbonated beverage bottlers, and bulk gas handlers who need to measure Carbon Dioxide. The IR-CO₂ sensor detects from low ppm levels to %Vol. concentrations of CO₂.

The smart PID sensor measuring a wide range of VOC's up to 5,000 ppm, depending on the gas selected. The Dräger X-am 7000 has 20 compounds pre-programmed in its library and 3 user programmable entries available. This sensor is well suited for confined space entry, area monitoring and HazMat applications.



ST-9382-2007

TECHNICAL DATA

Smart PID Sensors	VOC's
Smart EC Sensors	O ₂ , H ₂ S, CO, CL ₂ , NH ₃ , NO ₂ , SO ₂ , HCN, CO ₂ , NO, H ₂ , H ₂ S-HC, CO-HC, PH ₃ -HC, H ₂ -HC, ClO ₂ , Organic Vapors, Hydrides, Amines, Mercaptans,
Smart IR Sensors	Combustible Gases (Ex) or Carbon Dioxide (CO ₂)
Smart CAT Sensors	Standard 100 %LEL Combustible Gas or 100% Vol. CH ₄
Size	5.9 x 5.5 x 2.9 inch (150 x 140 x 75 mm)
Weight	2.4 lbs. (1.09 kg) with standard battery
Approvals	UL: Class I, Division 1, Groups A-D, T4 CSA: Class I, Division 1, Groups A-D, T4 ATEX: II2G EEx ia d IIC T4 M2 ia d I

DRÄGER X-AM 7000 ORDER INFORMATION

The following Kits include the Dräger X-am 7000 Monitor with Internal Pump, integrated rubber boot, carrying strap, standard NiMH battery pack, noted sensors (with 5 year warranty), single-unit battery charger system, calibration adapter, pump adapter with water stop filter, and instruction manuals.

Dräger X-am 7000 Ex / O ₂ / H ₂ S	45 52 198
Dräger X-am 7000 Ex / O ₂ / CO / H ₂ S	45 52 199
Dräger X-am 7000 IR-CO ₂	45 52 204
Dräger X-am 7000 IR-CO ₂ / O ₂	45 52 205
Dräger X-am 7000 IR-Ex / O ₂	45 52 200
Dräger X-am 7000 IR-Ex / O ₂ / CO / H ₂ S	45 52 203
Dräger X-am 7000 with datalogger, PID only	45 52 300
Dräger X-am 7000 with datalogger, PID EX	45 52 301
Dräger X-am 7000 with datalogger, PID, EX, O ₂	45 52 302
Dräger X-am 7000 with datalogger, PID, EX, O ₂ , CO	45 52 303
Dräger X-am 7000 with datalogger, PID, EX, O ₂ , CO, H ₂ S	45 52 304

For other sensor selections, see pages 19-20.

Accessories

Leather Carrying Case	83 17 683
Nylon Transport Case	83 17 684

Dräger X-am 7000 is available for rental.

Pac 7000: The innovative single gas instrument with reliable monitoring of ambient air.

ACTUAL SIZE SHOWN



DRÄGER PAC 7000 MONITOR

The innovative Dräger Pac® 7000 is small and robust, ergonomic and intuitive, economic and powerful – the Dräger Pac 7000 is an impressive single gas monitor equipped with a wide range of functions.

SMALL AND RUGGED

With its handy, pocket-sized design, the Dräger Pac 7000 is tailor-made for personal monitoring in daily work activities. Dräger Pac 7000 is dust proof and water resistant, meeting the requirements of IP 66/67.

A strong, tough, stainless steel crocodile clip allows the instrument to be fastened securely anywhere. The clip can be rotated to the best position for user comfort. The dual alarm LED's are positioned on opposite corners of the instrument for assured visibility. Battery and sensor replacement are easy and ensure a long instrument life.

DISPLAY

The concentration is displayed continuously in large, easy to read numbers. During an alarm, or on the push of a button, the display is backlit for better readability. Distinct icons are used to give status information and provide details on instrument functions. In addition, the peak concentration, time weighted average concentration (8-hour TWA value) and short-term exposure limit (15-minute STEL) for the measurement period are readily accessed. The Dräger Pac 7000 will show TWA, STEL and MAX values at the touch of a button and measure CO to 2000 ppm.

SENSOR TECHNOLOGY

Dräger Pac 7000 boasts the latest XXS DrägerSensor® technology, combining smaller size with high performance. Response time is very fast due to the short diffusion paths and the extremely quick electrochemical reaction times of these new sensors. The sensor is mounted in the unit so gas can enter from both the top and the front of the monitor. This positioning minimizes the possibility of the gas inlet being accidentally covered.

ALARM/WARNING FUNCTIONS

Along with the strong internal vibrating alarm, attention getting visual and audible alarms are triggered if the user adjustable alarm thresholds are exceeded. A two-tone audible alarm is used to maximize notification. The Dräger Pac 7000 features adjustable TWA and STEL alarms as well. A warning is also given near the end of the battery life or in the event of an error.

The Dräger Pac 7000 offers on-board calibration and real time datalogging. The Dräger Pac 7000 sensors has a 2-year warranty, and are expected to operate more than 3 years. The sensor is field replaceable by the user. The unit will operate 5 - 10 months 24/7 using a replaceable Lithium alkaline battery.

TECHNICAL DATA

Gases Measured	H ₂ S, CO, O ₂ and other toxics
Dimensions	2.5 x 3.3 x 1.0 inch (64 x 84 x 25 mm)
Weight	3.8 oz. (106 g)
Approvals	UL / ULc: Class I, Division 1, Groups A-G T4 MSHA: Permissible gas detector ATEX: I/II 1/2G EEx ia I/IIC, T4

ORDER INFORMATION

Description	Measuring Range	Alarm Threshold A1	Alarm Threshold A2	Order Number
Dräger Pac 7000 CO	0 to 1999 ppm	35 ppm	50 ppm	83 18 970
Dräger Pac 7000 H ₂ S	0 to 100 ppm	10 ppm	15 ppm	83 18 971
Dräger Pac 7000 H ₂ S-LC	0 to 100 ppm	10 ppm	20 ppm	83 21 004
Dräger Pac 7000 O ₂	0 to 25 Vol.-%	19.5 Vol.-%	23.5 Vol.-%	83 18 972
Dräger Pac 7000 HCN	0 to 50 ppm	2.5 ppm	4.5 ppm	83 18 973
Dräger Pac 7000 PH ₃	0 to 20 ppm	0.1 ppm	0.2 ppm	83 18 974
Dräger Pac 7000 CO ₂	0 to 5 Vol.-%	0.5 Vol.-%	1.0 Vol.-%	83 18 975
Dräger Pac 7000 SO ₂	0 to 100 ppm	2 ppm	4 ppm	83 18 976
Dräger Pac 7000 NO ₂	0 to 50 ppm	2.5 ppm	5 ppm	83 18 977
Dräger Pac 7000 Cl ₂	0 to 20 ppm	0.5 ppm	1 ppm	83 18 978
Dräger Pac 7000 NH ₃	0 to 300 ppm	25 ppm	50 ppm	83 18 979
Dräger Pac 7000 OV	0 to 200 ppm	5 ppm	10 ppm	83 10 006
Dräger Pac 7000 OV-A	0 to 200 ppm	5 ppm	10 ppm	83 10 007
Dräger Pac 7000 NO	0 to 200 ppm	2.5 ppm	5 ppm	83 21 263

5 YEAR WARRANTY MONITORS FOR O₂, CO, H₂S ORDER INFORMATION

Description	Measuring Range	Alarm Threshold A1	Alarm Threshold A2	Order Number
Dräger Pac 7000 5Y CO	0 to 1999 ppm	35 ppm	50 ppm	83 21 031
Dräger Pac 7000 5Y H ₂ S	0 to 100 ppm	10 ppm	20 ppm	83 21 032
Dräger Pac 7000 5Y O ₂	0 to 25 Vol.-%	19.5 Vol.-%	23.5 Vol.-%	83 21 033

ACCESSORIES

Connecting Cradle, complete with USB cable and Dräger PacVision® software	83 18 587
Lithium battery	45 88 183
Dust and water filter (4 per pkg)	45 43 836
Leather carrying case	45 43 822
Smart Bump Test Station, (order gas cylinder 58 L separately)	83 19 559
E-Cal instrument module for connection of 4 Dräger Pac 3500, 5500 or 7000 to a Dräger E-Cal Master Station or to Module Adapter	83 18 589



Pac 3500/5000 Monitors: Accurate, quick, reliable detection.

DRÄGER PAC 3500/5500 MONITORS

Accurate and easy to use, the Dräger Pac® 3500 and the Dräger Pac® 5500 are ideal for industrial personal monitoring applications. Providing quick detection of carbon monoxide, hydrogen sulfide or oxygen, these robust single gas detectors are made specifically to fit industrial safety requirements. The small, ergonomic Dräger Pac® 3500 has a lifetime of 2 years, while the Dräger Pac® 5500 has no lifetime limitation.

SMALL AND ROBUST HOUSING

Small in size and light in weight, the Dräger Pac® 3500 and the Dräger Pac® 5500 were developed with the needs of industrial users and applications in mind. The instruments provide easy, single-handed operation, even when wearing gloves, and is designed to withstand the toughest environments. The impact-resistant rubber housing is impervious to corrosive chemicals and meets the requirements of IP 66/67 to ensure operation even when sprayed with water.

SAFETY FIRST

To ensure continuous operation even when the unit is in a shirt pocket, the instrument's sensor has been carefully positioned to allow gas intake from both the top and the front of the device.

MINIATURE SENSOR TECHNOLOGY

The latest miniature Dräger XXS sensor technology has been incorporated into both the Dräger Pac® 3500 and the Dräger Pac® 5500. Dräger XXS sensors have been specifically developed for use in personal monitoring and handheld applications. These innovative sensors, which offer a long, expected life span from 5 to 8 years, combine high performance with a fast reaction time of just ten seconds.

HIGHLY VISIBLE DISPLAY

The large display, easily seen at a glance, shows both the gas concentration and the measurement unit. Alternatively, the instrument can be configured to show only the gas detected. The concentration is displayed only when the set alarm level has been exceeded. Language-free to avoid any misunderstanding, the continuous numeric display can also be back-lit to improve readability in darker environments.

WARNINGS AND ALARMS

In addition to a vibrating alarm, these instruments emit an audible, multi-tone signal and a clear, 360° visual alarm via bright, flashing LEDs at the top and base of the instrument. The alarm threshold levels can be individually adjusted to comply with company policy or other standards using Dräger software.

EVENT LOGGER

These monitors are complete with an infrared interface and are able to store up to 60 events with dates and times. They can be easily linked to a PC via a connecting cradle. This means that significant events such as switching on or off, gas and battery alarms, error codes, configuration changes, fresh air calibrations and bump tests can be downloaded, printed and stored centrally for future reference or reporting purposes.



D-657-2009



D-10149-2009



DRÄGER X-AM PAC® 3500/5500 MONITOR ORDER INFORMATION

Description	Measuring Range	Default Alarm Threshold A1/A2	Resolution	Response Time	Order No.
Dräger Pac® 3500 CO	0 – 500 ppm	35/50	1 ppm	15 sec.	45 43 957
Dräger Pac® 3500 H ₂ S	0 – 100 ppm	10/15	0.1 ppm	15 sec.	45 43 958
Dräger Pac® 3500 H ₂ S w/ yellow keypad overlay	0 – 100 ppm	10/15	0.1 ppm	15 sec.	45 43 963
Dräger Pac® 3500 O ₂	0 – 25 Vol.-%	19.5/23.5	0.1 Vol.-%	10 sec.	45 43 959
Dräger Pac® 3500 O ₂ w/ blue keypad overlay	0 – 25 Vol.-%	19.5/23.5	0.1 Vol.-%	10 sec.	45 43 964
Dräger Pac® 5500 CO	0 – 500 ppm	35/50	1 ppm	15 sec.	45 43 960
Dräger Pac® 5500 H ₂ S	0 – 100 ppm	10/15	0.1 ppm	15 sec.	45 43 961
Dräger Pac® 5500 H ₂ S w/ yellow keypad overlay	0 – 100 ppm	10/15	0.1 ppm	15 sec.	45 43 965
Dräger Pac® 5500 O ₂	0 – 25 Vol.-%	19.5/23.5	0.1 Vol.-%	10 sec.	45 43 962
Dräger Pac® 5500 O ₂ w/ blue keypad overlay	0 – 25 Vol.-%	19.5/23.5	0.1 Vol.-%	10 sec.	45 43 966

Accessories

Leather carrying case	45 43 822
High visibility yellow overlay for H ₂ S instruments	83 20 978
High visibility blue overlay for O ₂ instruments	83 20 977

Communication Accessories

Dräger CC-Vision®	64 08 515
Communication Module, complete with USB cable and Dräger PacVision® software	83 18 587

Calibration Accessories

Calibration adapter	83 18 588
Dräger Pac Module for Dräger E-Cal calibration system	83 18 589
Dräger Bump Test Station for Dräger Pac® 3500/5500, (order gas cylinder separately)	83 17 410
Dräger Smart Bump Test Station for Dräger Pac® 3500/5500 (order gas cylinder separately)	83 19 559
The station for use with Dräger Mobile Printer.	
Printer Set for Dräger Bump Test Station	83 21 010
Consisting of: Dräger Mobile Printer, single charger, rechargeable NiMH batteries, USB connection cable, positioning aid, Dräger CC-Vision®	

Replacement Parts

Lithium battery	45 88 183
Water and dust filter	45 43 836