

# Dräger X-am<sup>®</sup> 3500 Multi-Gas Detector

The Dräger X-am® 3500 was especially designed for clearance measurements. The 1 to 4 gas detector reliably detects flammable gases and vapours as well as O<sub>2</sub>, CO, H<sub>2</sub>S, NO<sub>2</sub> and SO<sub>2</sub>. The innovative signalling design and extensive range of accessories ensure optimum safety and easy handling.

Switch easily between pump and diffusion mode

Slots for DrägerSensors® to measure up to four gases

Measurement performance approval by external approval body (Europe): Flammable gases and vapours: methane, propane, n-nonane, oxygen as well as selected toxic gases



Glowing green D-Light (optional) indicates: tested and ready for use

Easy-to-read colour display with zoom function

Inductive charging

#### **Benefits**

#### Specially designed for use with a pump, optimised for clearance measurement

The Dräger X-am 3500 is equipped with a very powerful pump. It can be connected with hoses of up to 45 metres in length. A pump adapter makes it easy to switch between diffusion and pump mode at any time. This means the pump is only operated when you actually need it. That saves energy, reduces wear and tear, and thereby extends the lifespan of the pump.

The performance of selected sensors has been verified by an external approval body within the scope of the measurement performance approval (EN 60079-29-1), for combustible gases and vapours for methane, propane and n-nonane, among others.

Handy and durable, the Dräger X-am 3500 is intuitive to operate single-handedly using three function keys. The easy-to-read colour display clearly lays out all the information for you. Thanks to its compact and robust construction, the device can withstand even the harshest conditions.

#### Clear signalling design

The signal system of the Dräger X-am 3500 is based on a clear colour code, in accordance with the requirements of the EN 60079-29-1, EN 45544-1 and EN 50104:

- Red light = gas alarm
- Yellow light = device-related alarm, e.g. low battery
- Green light = device is ready for use

The green glow of the D-Light allows you to see from a distance whether the device has been properly tested and is ready for use.

In case of an alarm, the X-am 3500 alerts you with colourful alarm LEDs, a loud horn (100 dB(A) at a distance of 30 cm), and clearly palpable vibration. Optionally, four preset hazard symbols are available for the display which explicitly indicate the presence of explosive or toxic gas hazards, for example. This allows the user to easily recognise the type of hazard based purely on the symbol displayed.

#### **Economical Fleet Management**

Bumptest and calibration are carried out simply and quickly using the Dräger X-dock® calibrating station. Its low test gas consumption keeps operating costs to a minimum.

Its reporting function and numerous other useful features make the X-dock Manager PC software a smart addition to any fleet management operation. To identify the devices in the fleet, you can either use tried and tested barcodes or an integrated RFID transponder.

## **Benefits**

#### Inductive charging protects against wear and tear

The X-am 3500 features inductive charging. This makes it easier to operate and increases the lifespan of the device. Issues like corrosion and contact problems in the charging cradle are a thing of the past. You can charge (outside of explosion-hazard zones) and measure at once, e.g, when in use inside vehicles or on machinery. The charging cradle can connect with one another, taking up minimal space, and are compatible with existing Dräger X-am® series cradles.

### **Details**







Protective rubber boot



Dräger X-dock® module

# Comparison of Dräger X-am® 3500 and Dräger X-am® 8000

Features	Dräger X-am® 3500	Dräger X-am® 8000
Number of measuring gases	1 to 4	1 to 7
nternal pump, activation with pump adapter	Yes	Yes, optional
nductive charging	Yes	Yes
Customer-specific settings when ordering	No	Yes
Shoulder strap included as standard	No	Yes
Catalytic bead sensor DrägerSensor® CatEx 125 PR	Yes	Yes, configurable
Electrochemical (EC) DrägerSensors®: XXS O <sub>2</sub> , XXS CO LC, XXS H <sub>2</sub> S LC, XXS NO <sub>2</sub> , XXS SO <sub>2</sub>	Yes	Yes, configurable
Electrochemical (EC) DrägerSensors®: other sensors/special gases	No	Yes, configurable
nfrared (IR ES) DrägerSensors® Dual IR Ex/CO <sub>2</sub> (HC), IR-Ex, IR-CO <sub>2</sub>	No	Yes, configurable
R Ex Sensor: 2 gases/measurement ranges configurable	No	Yes, configurable
Photoionisation detector (PID) DrägerSensors®: PID HC, PID LC ppb	No	Yes, configurable
Automatic measurement range switching for the catalytic bead sensor, measuring gas: methane	No	Yes, configurable
Assistant: Confined Space, Leak Search, Sensor Selection, Benzene/Pre-Tube	No	Yes, only when a pump is installe
Toxic Twins: CO and HCN signal processing	No	Yes
Bluetooth®1	No	Option

Dräger offers two different multi-gas detection devices with internal pump: Dräger X-am® 8000 and Dräger X-am® 3500. The different features of both devices are summarised in the table above.

## Accessories



#### Inductive charger

To charge the device inductively

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## Accessories



#### Pedestal

To stand the device upright for area monitoring. The pedestal can be used with or without a shoulder strap.



#### Protective rubber boot

Prevents damage and wear in harsh environments. The protective boot can easily be replaced by the user.



#### Shoulder strap with adhesive label

With the shoulder strap you can comfortably carry the deivce. The corresponding adhesive label can be marked individually with device specific information, e.g. sensor assortment.

#### Services



#### **Product Service**

Our product service department supports you with a range of service packages – in our shops or on site in your plant. Care, servicing and maintenance are key factors when it comes to safety. Diligent maintenance and care is also absolutely necessary from an economics perspective. Preventive checks, service procedures and original replacement parts make your investment last longer.



#### **Rental Service**

From bridging a temporary shortage of equipment to procuring special equipment for applications involving specific requirements: If you only need to cover a temporary higher demand, then DrägerRental Service with over 65,000 pieces of rental equipment is an economical alternative to purchasing. Fast, straightforward and with a wide range of additional services available upon request.



#### **Training**

The Dräger Academy has imparted well-founded and practical knowledge for over 40 years. With over 110 authorized trainers and more than 600 available topics, we conduct more than 2,400 training sessions per year. We equip your employees with the knowledge required for real-life situations and ensure that the learned material can be recalled and applied reliably – in their everyday work and especially in stressful situations. To meet your needs, we are also happy to develop a customized training program specifically for you.



#### **On-site Safety Service**

Whether through a rental shop, personnel services or comprehensive safety management, our On-Site Safety Services provide support in all projects where there are particular safety risks – not to mention normal day-to-day business.

## Technical Data

Dimensions (H x W x D)	179 x 77 x 42 mm			
Weight	Approx. 495 g, depending on sensor	configuration, without strap, without pump		
	Approx. 550 g, depending on sensor	Approx. 550 g, depending on sensor configuration, without strap, with pump		
Housing	Durable two-component housing			
Display	High-contrast colour display			
Temperature	- 20 °C to + 50 °C			
Pressure	700 to 1.300 hPa (measuring function)			
	800 to 1,100 hPa (use in explosion-hazard areas)			
Relative humidity	10 to 90 % (short-term up to 95 %) r.	h.		
Alarms	Visual	3 LED 'red' (gas alarms),		
		3 LED 'yellow' (device alarms)		
	Acoustic	Multi-tone, typically 100 dB(A) at 30 cm		
	Vibration			
Ingress protection class	IP 68			
Energy supply	Lithium-ion battery, rechargeable, indu	uctive charging		
Operating times (Diffusion)	With CatEx and 3 EC sensors	Typically 24 hours		
	With 3 EC-sensors	Typically 120 hours		
Charging times	Typically 4 hours after use during a sh	nift of max. 10 hours		
Start-up times	Typically <60 seconds for standard se			
Data storage	24 MB, e.g. at 10 minutes per hour of gas exposure with measuring values changing			
	the second on all 4 channels: approx.	600 hours		
Pump operation	Max. hose length 45 m			
Approvals	Marking Explosion Protection:			
	ATEX / IECEx	I M1, II 1G		
		Ex da ia I Ma, Ex da ia IIC T4 Ga		
	EAC	PO Ex da ia I Ma X		
		0Ex da ia IIC T4 Ga X		
	cCSAus	Class I, Zone 0, AEx da ia IIC T4 Ga		
		Class II, Div 1, Gr. E, F, G		
		C22.2 No. 152, ANSI-ISA 12.13.01:2000		
	ANZEx	Ex da ia I Ma, Ex da ia IIC T4 Ga		
	Measurement Performance:	Explosion protection according ATEX:		
		EN 60079-29-1 (CatEx 125 PR, CatEx		
		125 PR Gas)		
		CatEx 125 PR: methane, propane, n-		
		nonane, etc.		
		The following applies to the CatEx 125		
		PR and approved gas "n-nonane": Only in		
		conjunction with pump adapter "Nonan",		
		part number: 3720225		
		Oxygen deficieny/excess oxygen: EN 50104 (XXS O <sub>2</sub> )		
		Toxic gases:		
		EN 45544-1, EN 45544-2, EN 45544-3		
		(XXS H <sub>2</sub> S LC, XXS CO LC)		
		Software: EN 50271		
	Directives	2014/34/EU (ATEX)		
	Directives	2014/34/EU (ATEX) 2014/30/EU (EMV)		
		2011/65/EU (RoHS) 2014/90/EU (MED)		
		7014/90/EU (MED)		
	Marine Approval	DNV GL		

## Technical Data

1 year for the power supply

Sensors: see DrägerSensor® & Portable Instruments Handbook

# Ordering Information

Dräger X-am® 3500		Order No.		
consists of: device with power s	supply (Lithium-ion battery),			
ntegrated pump, pump adapter	, data logger, manufacturer's			
certificate, certificate of calibrati	ion.			
Ex = CatEx 125 PR, Calibration	gas = Methane.			
nstruction for use included as s	standard in the following			
languages: DE, EN, FR, ES, PT	, IT, NL, RU, ZH, JA			
Dräger X-am® 3500 Ex, O <sub>2</sub> ¹ (without charging equipment)		83 28 412		
Dräger X-am <sup>®</sup> 3500 Ex, O <sub>2</sub> , H <sub>2</sub> S	3 LC <sup>1</sup> (without charging	83 28 414		
equipment)				
	LC <sup>1</sup> (without charging equipment	) 83 28 416		
Dräger X-am <sup>®</sup> 3500 Ex, O <sub>2</sub> , CO	LC, H <sub>2</sub> S LC <sup>1</sup> (without charging	83 28 418		
equipment)				
Dräger X-am <sup>®</sup> 3500 Ex, O <sub>2</sub> , CO	LC, H <sub>2</sub> S LC <sup>1</sup> Set (with charging	83 28 419		
equipment)				
Dräger X-am <sup>®</sup> 3500 Ex, O <sub>2</sub> , CO	LC <sup>1</sup> , NO <sub>2</sub> (without charging	83 28 422		
equipment)				
Dräger X-am <sup>®</sup> 3500 Ex, O <sub>2</sub> , H <sub>2</sub> S	3 LC <sup>1</sup> , SO <sub>2</sub> (without charging	83 28 424		
equipment)				
nstruction for use on request, a		90 33 668		
0 0 1	uage when ordering): DA, FI, NO,	1		
SV, PL, HR, SL, SK, CS, BG, F				
Instructions for use on request,		Available as download on	the product website	
following languages: LT, LV, ET		- <del> </del>		
FR, ES, RU	the following languages: DE, EN,	Available as download on	tne product website	
Sensors		Resolution		
	Measuring Range	resolution	Order No.	
CatEx 125 PR1	Measuring Range 0-100 % UEG	1 % UEG	Order No. 68 12 950	
		_		
DrägerSensor® XXS O <sub>2</sub> <sup>1</sup>	0-100 % UEG	1 % UEG	68 12 950	
DrägerSensor® XXS O <sub>2</sub> <sup>1</sup> DrägerSensor® XXS CO LC <sup>1</sup>	0–100 % UEG 0–25 vol %	1 % UEG 0.1 vol %	68 12 950 68 10 881	
DrägerSensor® XXS O <sub>2</sub> <sup>1</sup> DrägerSensor® XXS CO LC <sup>1</sup> DrägerSensor® XXS H <sub>2</sub> S LC <sup>1</sup>	0-100 % UEG 0-25 vol % 0-2,000 ppm	1 % UEG 0.1 vol % 1 ppm	68 12 950 68 10 881 68 13 210	
DrägerSensor® XXS O <sub>2</sub> <sup>1</sup> DrägerSensor® XXS CO LC <sup>1</sup> DrägerSensor® XXS H <sub>2</sub> S LC <sup>1</sup> DrägerSensor® XXS NO <sub>2</sub>	0-100 % UEG 0-25 vol % 0-2,000 ppm 0-100 ppm	1 % UEG 0.1 vol % 1 ppm 0.1 ppm	68 12 950 68 10 881 68 13 210 68 11 525	
DrägerSensor® XXS O <sub>2</sub> <sup>1</sup> DrägerSensor® XXS CO LC¹ DrägerSensor® XXS H <sub>2</sub> S LC¹ DrägerSensor® XXS NO <sub>2</sub> DrägerSensor® XXS SO <sub>2</sub>	0-100 % UEG 0-25 vol % 0-2,000 ppm 0-100 ppm 0-50 ppm	1 % UEG 0.1 vol % 1 ppm 0.1 ppm 0.1 ppm 0.1 ppm	68 12 950 68 10 881 68 13 210 68 11 525 68 10 884 68 10 885	
DrägerSensor® XXS O <sub>2</sub> <sup>1</sup> DrägerSensor® XXS CO LC <sup>1</sup> DrägerSensor® XXS H <sub>2</sub> S LC <sup>1</sup> DrägerSensor® XXS NO <sub>2</sub> DrägerSensor® XXS SO <sub>2</sub> I A three-year manufacturer's wa	0-100 % UEG  0-25 vol %  0-2,000 ppm  0-100 ppm  0-50 ppm  0-100 ppm	1 % UEG 0.1 vol % 1 ppm 0.1 ppm 0.1 ppm 0.1 ppm	68 12 950 68 10 881 68 13 210 68 11 525 68 10 884 68 10 885	
DrägerSensor® XXS O <sub>2</sub> <sup>1</sup> DrägerSensor® XXS CO LC <sup>1</sup> DrägerSensor® XXS H <sub>2</sub> S LC <sup>1</sup> DrägerSensor® XXS NO <sub>2</sub> DrägerSensor® XXS SO <sub>2</sub> <sup>1</sup> A three-year manufacturer's wa	0–100 % UEG  0–25 vol %  0–2,000 ppm  0–100 ppm  0–50 ppm  0–100 ppm  arranty applies to these sensors. Le	1 % UEG 0.1 vol % 1 ppm 0.1 ppm 0.1 ppm 0.1 ppm egal rights accruing from defe	68 12 950 68 10 881 68 13 210 68 11 525 68 10 884 68 10 885	
DrägerSensor® XXS O <sub>2</sub> <sup>1</sup> DrägerSensor® XXS CO LC <sup>1</sup> DrägerSensor® XXS H <sub>2</sub> S LC <sup>1</sup> DrägerSensor® XXS NO <sub>2</sub> DrägerSensor® XXS SO <sub>2</sub> I A three-year manufacturer's wa  Power supply unit Energy supply (incl. back housing	0–100 % UEG  0–25 vol %  0–2,000 ppm  0–100 ppm  0–50 ppm  0–100 ppm  arranty applies to these sensors. Le	1 % UEG 0.1 vol % 1 ppm 0.1 ppm 0.1 ppm 0.1 ppm egal rights accruing from defe	68 12 950 68 10 881 68 13 210 68 11 525 68 10 884 68 10 885 ects remain unaffected.	
DrägerSensor® XXS O <sub>2</sub> <sup>1</sup> DrägerSensor® XXS CO LC¹ DrägerSensor® XXS H <sub>2</sub> S LC¹ DrägerSensor® XXS NO <sub>2</sub> DrägerSensor® XXS SO <sub>2</sub> I A three-year manufacturer's wa Power supply unit Energy supply (incl. back housin	0–100 % UEG  0–25 vol %  0–2,000 ppm  0–100 ppm  0–50 ppm  0–100 ppm  arranty applies to these sensors. Letting)	1 % UEG 0.1 vol % 1 ppm 0.1 ppm 0.1 ppm 0.1 ppm degal rights accruing from defe	68 12 950 68 10 881 68 13 210 68 11 525 68 10 884 68 10 885 ects remain unaffected.	
DrägerSensor® XXS O <sub>2</sub> <sup>1</sup> DrägerSensor® XXS CO LC¹ DrägerSensor® XXS H <sub>2</sub> S LC¹ DrägerSensor® XXS NO <sub>2</sub> DrägerSensor® XXS SO <sub>2</sub> DrägerSensor® XXS SO <sub>2</sub> I A three-year manufacturer's wa Power supply unit Energy supply (incl. back housin Charging accessories Inductive charger for charging 1	0–100 % UEG  0–25 vol %  0–2,000 ppm  0–100 ppm  0–50 ppm  0–100 ppm  arranty applies to these sensors. Letting)	1 % UEG 0.1 vol % 1 ppm 0.1 ppm 0.1 ppm 0.1 ppm degal rights accruing from defe	68 12 950 68 10 881 68 13 210 68 11 525 68 10 884 68 10 885 ects remain unaffected.	
CatEx 125 PR1  DrägerSensor® XXS O <sub>2</sub> 1  DrägerSensor® XXS CO LC1  DrägerSensor® XXS H <sub>2</sub> S LC1  DrägerSensor® XXS NO <sub>2</sub> DrägerSensor® XXS NO <sub>2</sub> DrägerSensor® XXS SO <sub>2</sub> 1 A three-year manufacturer's water supply unit  Energy supply (incl. back housing the company of the com	0–100 % UEG  0–25 vol %  0–2,000 ppm  0–100 ppm  0–100 ppm  arranty applies to these sensors. Lung)  included as standard	1 % UEG  0.1 vol %  1 ppm  0.1 ppm  0.1 ppm  0.1 ppm  degal rights accruing from defe	68 12 950 68 10 881 68 13 210 68 11 525 68 10 884 68 10 885 ects remain unaffected.	
DrägerSensor® XXS O <sub>2</sub> <sup>1</sup> DrägerSensor® XXS CO LC¹ DrägerSensor® XXS H <sub>2</sub> S LC¹ DrägerSensor® XXS NO <sub>2</sub> DrägerSensor® XXS SO <sub>2</sub> ¹ A three-year manufacturer's wa  Power supply unit Energy supply (incl. back housing  Charging accessories Inductive charger for charging 1  Adapter for power plug	0–100 % UEG  0–25 vol %  0–2,000 ppm  0–100 ppm  0–100 ppm  o–100 ppm  included as standard	1 % UEG  0.1 vol %  1 ppm  0.1 ppm  0.1 ppm  0.1 ppm  dd 83  83  83	68 12 950 68 10 881 68 13 210 68 11 525 68 10 884 68 10 885 ects remain unaffected.  26 817  25 825 25 736	

# Ordering Information

Power plug 100-240 VAC; 6.25 A, for	requires adapter (83 25 736)	83 21 850
charging up to 20 devices		
Vehicle connector cable 12/24 V for charging 1 device		45 30 057
Vehicle connector cable 12/24 V DC for	requires adapter (83 25 736)	83 21 855
charging up to 5 devices	required daupter (ee 25 766)	00 21 000
Vehicle mount	requires adapter for power plug	83 27 636
	(83 25 736) and vehicle connector cable	
	12/24 V DC (83 21 855)	
Kit vehicle charger	with power supply (83 21 855), adapter	83 28 283
	(83 25 736) and mounting kit	
	(83 27 636) - w/o inductive power unit	
Pump accessories		
Dust and water filter for pump inlet	included in device when pump option is	83 19 364
	selected	
Dust and water filter for pump inlet		37 05 997
(set of 20)		
Pump adapter	included in device when pump option is selected	83 26 820
Pump adapter "Nonane"	Required if the measurement performance	37 20 225
	approval according to EN 60079-29-1 is	
	required for the CatEx for measurement	
	gas "Nonane".	
Probes and hoses		
Telescopic probe 100	connection for filter is included in order no.	83 16 530
	83 19 364 (dust/water filter)	
Telescopic probe 150, stainless steel	connection for filter is included in order no. 83 19 364 (dust/water filter)	83 16 533
GP600 probe (plastic), with adapter	connection for filter is included in order no.	83 28 667
	83 19 364 (dust/water filter)	
5 m FKM hose, 3.2 mm, with adapters		83 25 705
10 m FKM hose, 3.2 mm, with adapters		83 25 706
20 m FKM hose, 3.2 mm, with adapters		83 25 707
45 m FKM hose, 3.2 mm, with adapters		83 28 212
Float probe EPP, incl. 3 m hose, 3.2 mm		83 25 831
Float probe EPP, incl. 10 m hose, 3.2 mm		83 25 832
Float probe (transparent), with adapter		83 27 654
Additional probes, hoses and accessories ar	re available. Please contact us.	
Calibration accessories		
Dräger X-am® 3500/8000 calibration	replaced by 37 20 224	83 26 821
adapter		
Dräger X-am® 3500/8000 calibration		37 20 224
adapter 2.0		
Dräger X-dock® Module Dräger	can also be used with X-am® 3500	83 21 893
X-am <sup>®</sup> 8000		
Dräger X-dock® Module Dräger	can also be used with X-am® 3500	83 21 894
X-am® 8000+ charging		
Dräger X-dock® 5300 (Dräger X-am® 8000)	can also be used with X-am® 3500	83 21 882
with master		

# Ordering Information

Further versions and accessories for the		Please contact Dräger
automatic test station Dräger X-dock®	_	
Nonane tester		83 25 861
Test gases		Please contact Dräger.
Accessories for measured value		
acquisition and configuration		
Dräger CC-Vision		Freeware (www.draeger.com/software)
Dräger GasVision License Key		83 25 646
USB Dira Dongle / IR interface		83 17 409
Holder for USB Dira Dongle		83 25 859
Other accessories		
Protective rubber boot, removable		83 25 858
Leather case for the device		83 27 664
Transport case (empty)		83 27 661
Protective Display cover (set of three)		83 26 828
Shoulder strap (complete)	requires bow for shoulder strap (83 26 819)	83 26 823
Retractable lenyard	requires connector for shoulder strap	83 23 032
Holder for label (on strap)		83 26 824
Adhesive label for individual inscriptions, for holder on strap, silver (set of 5)		83 27 645
Adhesive label, blue (set of 5)		83 27 646
Adhesive label, red (set of 5)		83 27 647
Adhesive label, green (set of 5)		83 27 648
Adhesive label, yellow (set of 5)		83 27 649
Pedestal for holding device upright, e.g.	requires connector for shoulder strap	83 25 874
for area monitoring		
Transponder reader for reading the		65 59 283
integrated RFID transponder (optional)		

Notes

Notes

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