

# Dräger X-zone<sup>®</sup> 5500 Area Monitoring

State-of-the-art area monitoring – the Dräger X-zone<sup>®</sup> 5500 in combination with the Dräger X-am<sup>®</sup> 5000, 5100 or 5600 gas detection instruments can be used for the measurement of up to six gases and extends the portable gas detection technology to a comprehensive system with many applications.



Dräger. Technology for Life®

# **Benefits**

### Innovative area monitoring

The Dräger X-zone 5500 transforms the Dräger personal gas detection instruments X-am 5000, 5100 and 5600 into innovative area monitoring devices for a wide range of applications. A patented combination for increased safety – in addition to the personal air monitors carried on the body, these area monitors are positioned where gas hazards are expected.

### **Clear warning**

Even from a distance, the illuminated green LED ring indicates that the air is free of toxic and combustible gases. Upon detection of gas hazards, the LED color changes from green to red, thus providing a clear visual warning that gas is present. Additionally, a loud and highly audible evacuation alarm is emitted. The Dräger X-zone 5500 gas entry is located that the gas can diffuse into the Dräger X-am 5000, 5100 or 5600 from all sides.

### **Wireless fenceline**

Up to 25 Dräger X-zone 5500 can be automatically interconnected to form a wireless fenceline. The interconnection of the area monitoring devices allows for rapid establishment of safety networks for larger areas. A Dräger X-zone 5500 detecting a gas alarm transmits the alarm signal to all interconnected units. A red flashing master alarm in the mother unit detecting gas contrasts with red/green flashing alarms of the connected daughter units providing simple recognition of alarm status and the actual location of the hazard.

With the corresponding configuration, the maximum gas concentration in the monitored area is shown on the display. Combined with the display of the X-zone ID a clear containment of the hazard area is possible.

### Continuous operation for up to 120 hours

The 24 Ah battery of the Dräger X-zone 5500 provides up to 120 hours of continuous operation – up to a complete working week.

### **Other benefits**

- 360°- gas entry
- Approval for Ex-Zone 0 (with Switch On or Switch Off for Ex-Zone 1)
- daily function test and calibration not required after single on-site testing
- individually configurable with the Dräger CC-Vision PC software (e.g. alarm frequency)
- inductive charging station: easy and convenient non-contact charging

#### Data interface modbus

- Integration in a control room system
- Connection to external displays, such as the Visualisation Panel X-zone 5500

# **Benefits**

### Optional: Dräger switching station X-zone Switch On or Switch Off

The accessory Switch On or Switch Off box provides a cost-effective, fast and easy way of increasing safety during external work in Ex-zone 1. In the event of an alarm, the Switch Off box automatically cuts off the power supply in just seconds, for instance, to a welder. In the case of danger, the Switch On box responds immediately by activating, for instance, a traffic light for access control or ventilation. The corresponding switching station can be easily connected to the Dräger X-zone 5000 via the potential-free alarm contact.

### The secure type of area monitoring

Time, place and gas concentration are the most important data in the event of a gas leak. In an emergency, every second counts. Consequently, we have developed a more efficient and significantly safer method of area monitoring compared to conventional solutions: the Dräger X-zone 5500 together with X-zone Com. With these you can receive and view the measured data and alarms outside of the danger zone.

### X-zone Com GSM-Module

This module allows you to access the Dräger X-zone 5500 data wirelessly over the GSM network. Be it status requests or alerts via SMS using a periodic delivery of data via e-mail to a FTP server or a cloud service – the X-zone Com GSM module sends all data directly to the device of your choice.

Up to 15 Dräger X-zone can automatically connect themselves to a wireless alarmchain to accurately and comprehensively monitor large areas. For this only a single X-zone Com is required to retransmit the data of the entire chain. All relevant information such as maximum values of the measured gas type will reach those responsible within seconds.

On the laptop data of the Dräger X-zone 5500 group can also be displayed via Bluetooth<sup>®</sup>. With the integrated GPS module, the position of the X-zone Com and thus the location of the hazard source is transmitted. A data logger continuously stores the measured values. This ensures that no data is lost. Analysis of trends are simply in the cloud possible.

Thus, all important measures covering evacuation and protection as well as the elimination of the problem and the resumption of work can be implemented quickly, efficiently and, above all, safer.

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# System Components



## X-zone Com®

The X-zone Com informs about gas concentrations and alarms by text message, email and Cloud.

### Switchbox

The Dräger X-zone Switch On/Off switch the power of the connected end devices on/off when the X-zone alarms.

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Dräger X-am<sup>®</sup> 5000

The Dräger X-am<sup>®</sup> 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<sup>®</sup> 5100

For manufacturing petrochemical products, aseptic packing, or handling of rocket fuel: the Dräger X-am<sup>®</sup> 5100 portable single-gas detector guarantees that you use the safest methods possible for handling HF, HCl, H<sub>2</sub>O<sub>2</sub> or hydrazine – thanks to proven Dräger sensor technology and a device design which is perfectly customised to reactive gases.

# System Components



## Dräger X-am<sup>®</sup> 5600

Featuring an ergonomic design and innovative infrared sensor technology, the Dräger X-am<sup>®</sup> 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.

# Visualisation Panel X-zone® 5500



The Dräger visualisation panel is a high-resolution 8.4" touch panel used to provide a visual representation of gas concentrations detected by X-zone<sup>®</sup> 5000/5500 instruments. It can be integrated into the local network via the web interface and can easily be accessed and operated using a web browser.

# Accessories



### Bump test adapter

For function tests

# Accessories



# Alarm damper

For use within bump tests

# 

### Socket

For measurements of light gases



# Induction charger

Allowing easy charging



# Plug- in charger

100 – 240 V

# Accessories

D-1571-2010

D-30746-2015

ST-5080-2005



## Float probe

With 5 m or 16.4 ft. viton hose

### Hose set

Consisting of water trap, dust and water filter

## Dräger Configuration and Evaluation Software

Save measurement results, professionally configure gas detection instruments and viewing performance data – all that is possible with the tailor-made Dräger software.

## Calibration gas and accessories

Calibration of equipment will ensure safe operation and functionality of equipment and will also meet with the applicable regulations and codes of practice. Various calibration options are available to provide this facility.

# **Related Products**



## Dräger X-am<sup>®</sup> 2500

The Dräger X-am<sup>®</sup> 2500 was especially developed for use as personal protection. The 1 to 4 gas detector reliably detects combustible gases and vapours, as well as O<sub>2</sub>, CO, NO<sub>2</sub>, SO<sub>2</sub> and H<sub>2</sub>S. Reliable and fully mature measuring technology, durable sensors and easy handling guarantee a high degree of safety with extremely low operating costs.



## Dräger X-am<sup>®</sup> 7000

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.

# Technical Data

Dimensions (W x H x D)	490 x 300 x 300 mm		
	20 x 12 x 12 in.		
Weight	10 kg (22 lbs.) (24 Ah battery)		
Ambient conditions	Temperature max. +50 °C; max. 104 °F		
	Pressure 700 to 1,300 hPa		
	Humidity 10 to 95 % r.h.		
Ingress Protection	IP67		
Alarm	Visual 360° LED (illuminated ring)		
	Audible 360°; > 108 dB in a distance of 1 m (30 ft.), 120 dB in a distance of 30 cm (1 ft.		
	Configurable alarm patterns, frequencies and volumes		
Life signal	Green status display (360°), illuminated ring (LED)		
Operating time	Approx. 120 h (24 Ah battery)		
- r 0	Depending on sensor equipment / configuration of the life signal		
Charging time	Approx. 14 h		
	Flexible power supply: External 100 – 240 V charger (worldwide) or inductive wireless		
	charger		
Pump operation	Maximum hose length: 45 m (150 ft.)		
Alarm output	Potential-free alarm contact for intrinsically safe circuits (6-pole); < 20 V to 0.25 A		
	(0.15 A constant current); Resisting load		
Radio transmission	Worldwide license-free ISM frequencies		
	Digital radio, robust and interference-free transmission up to 100 m (656 ft.)		
RF approvals	868 MHz (EU, Norway, Switzerland)		
Approvals	ATEX	IM1 Ex ia IMa	
	ALLA	II 1G Ex ia IIC T3 Ga	
		II 2G Ex ia d IIC T4 Gb	
	IECEx	Ex ia IIC T3 Ga	
	ILOLA	Ex ia d IIC T4 Gb	
		Ex ia l Ma	
	CSA/US	Class I, zone 0, A/Ex ia IIC T3 /Ga	
	C3A/03	Class I, zone 1, A/Ex ia d IIC T4 /Gb	
X-zone Com <sup>®</sup>			
Dimensions (W x H x D)	360 x 360 x 240 mm (mit X-zone <sup>®</sup> 360 x 360 x 610 mm)		
Weight	7 kg		
Protection class	IP67 (with closed ports)		
ATEX-Label	ATEX II 2G Ex ib [ia IIC Ga] IIB T4 Gb		
Temperature range	battery operation:	-10 °C – +40 °C	
	charging/line operated:	0 °C – +30 °C	
Battery	13.5 Ah NiMh, 12 V DC		
Data storage	8 MB, 270,000 data sets		
Communication	Bluetooth class 1		
	GSM/GPRS Telit Modem		
	antenna dual band 900/1800 MHz		
Interfaces		-	
Interlaces	RS485 connection to X-zone®		
	DS020 connection to DC		
	RS232 connection to PC Connection to Dräger Switch On/	Switch Off	

# Ordering Information

Dräger X-zone <sup>®</sup> 5500	Part-No.
Dräger X-zone® 5500, 868 MHz, 24 Ah battery with diffusion cap	83 24 819
Dräger X-zone <sup>®</sup> 5500 with integrated pump, 868 MHz,	83 24 821
24 Ah battery with diffusion and pump cap	
Gas supply adapter	83 23 314
Alarm damper	83 20 110
Socket, 25 cm high (12 in.)	83 20 645
Set: cap for Dräger X-am <sup>®</sup> 5100; for X-zone <sup>®</sup> with pump	83 23 938
Charging accessories	
Inductive charger	83 22 080
Plug-in charger	83 20 749
Pump accessories	
Float probe with 5 m or 16.4 ft. FKM hose	83 18 371
Hose set (consisting of water trap, dust and water filter)	83 21 527
Hose, electronically conductive	11 80 681
FKM hose, solvent-resistant	12 03 150
PVC hose	83 20 766
Communication accessories	
Dräger CC-Vision	www.draeger.com
USB DIRA with USB cable	83 17 409
Optional equipment	
Dräger X-zone <sup>®</sup> Switch Off	83 22 260
Dräger X-zone <sup>®</sup> Switch On	83 22 270
X-zone Com <sup>®</sup> GSM-Modul	
X-zone Com®	83 24 383
X-zone Com <sup>®</sup> incl. sim card	83 26 514
Cloud license 1 year	83 25 346
Cloud license 3 years	83 25 347
External Display	
Visualisation Panel X-zone <sup>®</sup> 5500	83 25 395
X-zone Com <sup>®</sup> is a registered trademark of ORI GmbH & Co.KG.	

Notes

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