

Dräger X-zone® 5800 Area Monitor

State-of-the-art area monitoring – the Dräger X-zone® 5800 in combination with the Dräger X-am® 5000, 5100 or 5600 gas detection instruments can be used for the measurement of up to six gases. The internal pump and continuous power supply in the explosive area of zone 0 extend the range of applications in mobile gas detection technology.



Dräger X-zone® 5800



Quick guide

Connection for continuous power supply in EX areas

Connection switching relay/RS 485 communication

Connection charging socket/RS 485 communication

Benefits

Area monitor

- combination with Dräger X-am® 5000, 5100 or 5600 – measurement of up to 6 gases
 - extensive area monitoring thanks to fenceline of up to 25 devices
 - option for permanent power supply in explosive areas (zone 0)
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Innovative area monitoring

The Dräger X-zone 5800 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 5800 gas entry location permits gas to diffuse into the Dräger X-am 5000, 5100 or 5600 from all sides.

Wireless fenceline

Up to 25 Dräger X-zone 5800 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 5800 detecting a gas alarm transmits the alarm signal to all interconnected units. A red flashing master alarm in the unit detecting the gas contrasts with red/green flashing alarms of the connected units. This provides 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 5800 provides up to 120 hours of continuous operation – up to a complete working week.

The Power Supply Ex is available for continuous use of the X-zone 5800. It offers a 50 m supply from a safe area to a potentially explosive area and is even approved for use with the X-zone 5800 in Zone 0.

For safe transport, the cable of the Power Supply Ex is rolled up on a cable drum in which the power supply is also integrated.

Benefits

Pump or diffusion mode – suitable for your respective application

The X-zone 5800 offers you both the possibility to draw in gas from a distance of up to 30 m in pump mode and the use in diffusion mode. The switch between these two options takes less than a minute. Simply exchange the pump cover or the supplied diffusion cover against each other. The X-zone 5800 is ready for another measuring operation – without any tools.

Other benefits

- 360°-gas entry
 - Approval for Ex-Zone 0
 - individually configurable with the Dräger CC-Vision PC software (e.g. alarm frequency)
 - inductive charging station: easy and convenient non-contact charging (outside the Ex-area)
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Interfaces

The interfaces on the back of the device offer the possibility of switching actuators in case of alarms by means of the configurable relay. The interface can also directly forward device data, such as measured values of sensors and alarms, via Modbus protocol. This allows you to integrate the devices into existing evaluation units.

Extended area monitoring – X-zone Com

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 5800 together with X-zone Com. With these you can receive and view the measured data and alarms outside of the danger zone.

The module X-zone Com allows you to access the Dräger X-zone 5800 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 25 Dräger X-zone can automatically connect themselves to a wireless alarmchain to accurately and comprehensively monitor large areas. Only a single X-zone Com is required to retransmit the data of the entire chain. All relevant information will reach those responsible within seconds.

Data from the Dräger X-zone 5800 group can also be displayed on a laptop via Bluetooth®. 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 ensuring that no data is lost. Trend analysis using data from the cloud is 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, safely.

System Components



D-21278-2020

Power Supply Ex

The Power Supply Ex enables the X-zone 5800 to be continuously supplied with power even within an explosion-proof area.



D-3048-2014

X-zone® Com

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



D-14325-2017

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 oxygen and harmful concentrations of toxic gases, organic vapors, Odorant and Amine.



D-31721-2011

Dräger X-am® 5100

For manufacturing petrochemical products, aseptic packing, or handling of rocket fuel: the Dräger X-am® 5100 portable single-gas detector ensures that you use the safest methods possible for handling HF, HCl, H₂O₂ or hydrazine – thanks to proven Dräger sensor technology and a device design which is perfectly customised to reactive gases.

System Components



Dräger X-am® 5600

Featuring an ergonomic design and innovative infrared sensor technology, the Dräger X-am® 5600 is one of 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 flammable and toxic gases and vapors as well as oxygen.

Accessories



Bump test adapter

For function tests



Alarm damper

For use within bump tests

Accessories



Socket

For measurements of light gases



Induction charger

Allowing easy charging



Plug-in charger

100 – 240 V



Float probe

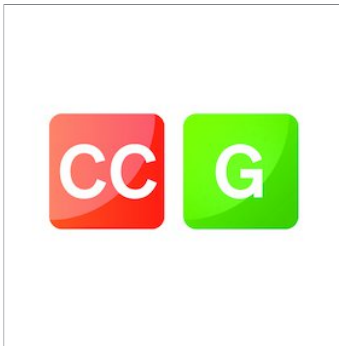
With 5 m or 16.4 ft. FKM hose

Accessories



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 easily available.

Related Products

D-2754-2018



Dräger X-am® 2500

The Dräger X-am® 2500 was especially developed for use as personal protection. The 1 to 4 gas detector reliably detects combustible gases and vapours, as well as O₂, CO, H₂S, NO₂ and SO₂. Reliable and fully mature measuring technology, durable sensors and easy handling ensure a high degree of safety with extremely low operating costs.

D-6491-2017



Dräger X-am® 8000

Clearance measurement was never this easy and convenient:
The 1 to 7 gas detector detects toxic and flammable gases as well as vapours and oxygen all at once – either in pump or diffusion mode. Innovative signalling design and handy assistant functions ensure complete safety throughout the process.

Technical Data

Dräger X-zone® 5800

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. 122 °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 (3 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) 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.), 30 m (100 ft.) for zone 0	
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 (328 ft.)	
RF approvals	868 MHz (EU, Norway, Switzerland), 915 MHz (USA, Canada, Singapore, Australia), 433 MHz (Russia)	
Approvals	ATEX	I M1 Ex ia I Ma II 1G Ex ia IIC T4 Ga
	IECEX	Ex ia I Ma Ex ia IIC T4 Ga

Power Supply Ex

Dimensions	365 x 320 x 250 mm	
Weight	10 kg	
Protection class	IP 44	
Approvals	ATEX	II (1)G [Ex ia Ga] IIC
	IEC Ex	[Ex ia Ga] IIC
	CSA/US	pending
Temperature range	-20 °C to +55 °C	
Cable length	Cable drum 50 m Connection cable fix 0.5 m + Power Cord EU, UK, US or AUS 3 m	

X-zone® Com

Dimensions (W x H x D)	360 x 360 x 240 mm / 14.17 x 14.17 x 9.48 in (with X-zone® 360 x 360 x 610 mm / 14.17 x 14.17 x 24.02 in.)	
Weight	7 kg	
Protection class	IP67 (with closed ports)	
Approval	ATEX	II 2G Ex ib [ia IIC Ga] IIB T3/T4 Gb
Temperature range	battery operation:	-10 °C – +40 °C / 14 °F – 104 °F
	charging/line operated:	0 °C – +30 °C / 32 °F – 86 °F
Battery	13.5 Ah NiMH, 12 V DC	
Data storage	8 MB, 270,000 data sets	
Communication	Bluetooth class 1	

Technical Data

	GSM/GPRS Telit Modem antenna dual band 900/1,800 MHz
Interfaces	RS485 connection to X-zone® RS232 connection to PC
GPS receiver	

Ordering Information

Dräger X-zone® 5800	Part-No.
Dräger X-zone® 5800 433 MHz, 24 Ah pump	83 29 020
Dräger X-zone® 5800 868 MHz, 24 Ah pump	83 29 030
Dräger X-zone® 5800 915 MHz, 24 Ah pump	83 29 040
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® 5100 for X-zone® with pump	83 23 938
Power supply ex-approved area	
Power supply Ex 230 V	83 29 000
Power supply Ex 110 V	83 29 010
Power cord EU	83 29 180
Power cord UK	83 25 392
Power cord AUS	83 25 393
Power cord USA	83 29 049
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
Tygon® hose	83 20 766
Communication accessories	
Dräger CC-Vision	www.draeger.com/software
USB DIRA with USB cable	83 17 409
X-zone® Com GSM-Modul	
X-zone® Com	83 24 383
X-zone® Com incl. sim card	83 26 514
Cloud license 1 year	83 25 346
Cloud license 3 years	83 25 347

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Notes



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