

# Dräger X-am<sup>®</sup> 8000 Multi-Gas Detector

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.

Switch easily between pump and diffusion mode

Impact detection informs you to severe mechanical stresses

Assistants for clearance measurement, leak detection, sensor selection and benzene-specific testing with the PID (pre-tube)

Optional Bluetooth® module to connect with the CSE Connect app for Android and iOS



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

Five slots for DrägerSensors® to measure up to seven gases, two high-performance PID sensors

Easy-to-read colour display with zoom function

Inductive charging

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

Bluetooth® is a registered trademark of Bluetooth SIG, Inc.

#### **Benefits**

#### Multi-gas detector

- 1- to 7 gas detection device
- for clearance measurement
- detection of toxic and combustible gases as well as vapours and oxygen

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

The Dräger X-am® 8000 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.

Handy and durable, the Dräger X-am® 8000 is intuitive to operate single-handedly using three function keys. The easy-to-read colour display clearly lays out all the information for you.

The multi-gas detector also features advanced software functions including change of measurement gas for PID, CatEx and IR sensor during operation. This is based on an on-board libary and a comfortable assistant to hide unused sensor channels to adapt the instrument flexible to the measurement task.

Standard accessories include a sturdy shoulder strap, so you can comfortably carry the X-am 8000. Thanks to its compact and robust construction, the device can withstand even the harshest conditions.

#### Clearance measurement, release and documentation in no time

The X-am 8000 effectively supports various applications with specially developed assistant functions that guide you through each process step by step. During clearance measurement, for example, the smart assistant calculates the necessary flooding time for the device and probe (FKM hose) based on parameters such as measuring gases, temperature limits, and the indicated hose length. Additionally, customer defined flooding times are also possible.

When monitoring for possibly high methane concentrations, an optional automatic measurement range switch makes it easier to take a reading: if the Cat-Ex sensor measures values above 100 % LEL, the display switches to the range of 0 to 100 vol %. A similar function to measure in % LEL and vol% simultanously is also available for the IR EX ES sensor.

The DrägerSensor CatEx 125 PR Gas offers a special variant for the measuring gas methane, which enables measurements in the ppm range.

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.

#### **Benefits**

An additional useful tool is CSE Connect. It combines an app, specially designed for the X-am 8000, with a cloud-computing solution. Measuring jobs can be quickly and easily transferred to the app using an online application. An optional Bluetooth® module in the Dräger X-am 8000 enables measured values to be transferred automatically to the CSE Connect app. You can also easily and conveniently use the app to create measurement reports. This saves time and helps you manage your measuring tasks during clearance measurements more efficiently.

#### Clear signalling design

The signal system of the Dräger X-am 8000 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 8000 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.

The X-am 8000 is equipped with an impact detection system. The event report indicates whenever severe mechanical impacts have occurred that might result in functional impairments of the device or the sensors. These are also documented in the data logger. With this information, a device attendant can specifically check the device. As an option the instrument can be locked after a detected impact as well.

#### **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.

#### Specialist for high and low hydrocarbon concentrations

To measure hard-to-detect hydrocarbons, you can fit the Dräger X-am 8000 with one of two high-performance PID sensors. The PID HC covers a measurement range of 0 to 2,000 ppm (Isobutene). The PID LC ppb is particularly suited for a measurement range of 0 to 10 ppm (Isobutene) with a high resolution in the range below 1 ppm.

#### **Benefits**

For benzene-specific measurements, the X-am 8000 can be used with a pre-tube. The advantage: you only need one measuring device for this application, which significantly reduces the costs of purchasing, maintaining and transporting devices in use. The use of the pre-tubes is supported by a built-in assistant.

#### Inductive charging protects against wear and tear

The X-am 8000 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**







Shoulder strap Pump adapter

Pre-tube holder

## 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®:<br>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®:<br>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,<br>Benzene/Pre-Tube  | No                | Yes, only when a pump is installe |
| Foxic 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



#### Pedestal

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

#### Services



#### **Product Service**

Our product service provides support with different service packages – in our workshops or directly on your premises. Care, maintenance and servicing are crucial for safety and reliability – but careful maintenance and care are a must, even when it comes to commercial considerations. Preventive checks, ongoing care and use of original replacement parts improve the longevity of your investment.



#### **Training**

The Dräger Academy has shared its solid, practical knowledge for over 40 years. We hold more than 2,400 training courses each year, on a range of over 600 topics, with more than 110 authorised trainers. We equip your staff with practical knowledge and ensure that what they learn can be applied effectively, both day-to-day and, more importantly, whenever critical situations occur. We will be pleased to develop a customised training programme for you.



#### 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.



#### **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

| 179 x 77 x 42 mm  |  |  |  |  |
|---|--|--|--|--|
| Approx. 495 g, depending on sensor configuration, without strap, without pump |  |  |  |  |
| Approx. 550 g, depending on sensor co   | nfiguration, without strap, with pump  |  |  |  |
| Durable two-component housing   |  |  |  |  |
| High-contrast colour display  |  |  |  |  |
| -20 °C to 50 °C   |  |  |  |  |
| 700 to 1,300 hPa (measuring function)   |  |  |  |  |
| 800 to 1,100 hPa (use in explosion-hazard areas)                              |  |  |  |  |
| 10 to 90 % (short-term up to 95 %) r.h.                                       |  |  |  |  |
| Visual:   | 3 LED 'red' (gas alarms),<br>3 LED 'yellow' (device alarms)  |  |  |  |
| Acoustic  | Multi-tone, typically 100 dB(A) at 30 cm   |  |  |  |
| Vibration   |  |  |  |  |
| IP 68   |  |  |  |  |
| Lithium-ion battery, rechargeable, induct                                     | ive charging   |  |  |  |
| With CatEx and 3 EC sensors   | Typically 24 hours   |  |  |  |
|   | Typically 22 hours   |  |  |  |
|   | Typically 120 hours  |  |  |  |
|   | Typically 17 hours   |  |  |  |
| <u>-</u>  |  |  |  |  |
|   | Typically 16 hours   |  |  |  |
| <u> </u>  | Typically 14 hours   |  |  |  |
|   | Typically 42 hours   |  |  |  |
| Typically 4 hours after use during a shift                                    | of max. 10 hours   |  |  |  |
| Typically <60 seconds for standard sens                                       | sors   |  |  |  |
| 24 MB, e.g. at 10 minutes per hour of g                                       | as exposure with measuring values changing by  |  |  |  |
| the second on all 7 channels: approx. 40                                      | 00 hours   |  |  |  |
| Max. hose length 45 m   |  |  |  |  |
| Marking Explosion Protection:   | Marking Explosion Protection:  |  |  |  |
| ATEX / IECEx  | I M1, II 1G  |  |  |  |
|   | Ex da ia I Ma, Ex da ia IIC T4 Ga  |  |  |  |
| EAC   |  |  |  |  |
| LAC   | PO Ex da ia I Ma X   |  |  |  |
|   | PO Ex da ia I Ma X<br>0Ex da ia IIC T4 Ga X  |  |  |  |
|   | 0Ex da ia IIC T4 Ga X  |  |  |  |
| cCSAus  | 0Ex da ia IIC T4 Ga X<br>Class I, Zone 0, AEx da ia IIC T4 Ga  |  |  |  |
|   | OEx da ia IIC T4 Ga X<br>Class I, Zone 0, AEx da ia IIC T4 Ga<br>Class II, Div 1, Gr. E, F, G  |  |  |  |
| cCSAus  | OEx da ia IIC T4 Ga X 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  |  |  |  |
| cCSAus  | OEx da ia IIC T4 Ga X 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 Ex da ia I Ma, Ex da ia IIC T4 Ga  |  |  |  |
| cCSAus  | OEx da ia IIC T4 Ga X  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  Ex da ia I Ma, Ex da ia IIC T4 Ga  Explosion protection according ATEX:  |  |  |  |
| cCSAus  | OEx da ia IIC T4 Ga X 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 Ex da ia I Ma, Ex da ia IIC T4 Ga  |  |  |  |
| cCSAus  | OEx da ia IIC T4 Ga X 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 Ex da ia I Ma, Ex da ia IIC T4 Ga Explosion protection according ATEX: EN 60079-29-1 (CatEx 125 PR, CatEx 125 PR Gas, (Dual) IR Ex, XXS H2 HC)   |  |  |  |
| cCSAus  | OEx da ia IIC T4 Ga X  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  Ex da ia I Ma, Ex da ia IIC T4 Ga  Explosion protection according ATEX: EN 60079-29-1 (CatEx 125 PR, CatEx   |  |  |  |
| cCSAus  | OEx da ia IIC T4 Ga X 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 Ex da ia I Ma, Ex da ia IIC T4 Ga Explosion protection according ATEX: EN 60079-29-1 (CatEx 125 PR, CatEx 125 PR Gas, (Dual) IR Ex, XXS H2 HC)   |  |  |  |
| cCSAus  | OEx da ia IIC T4 Ga X  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  Ex da ia I Ma, Ex da ia IIC T4 Ga  Explosion protection according ATEX: EN 60079-29-1 (CatEx 125 PR, CatEx 125 PR Gas, (Dual) IR Ex, XXS H2 HC)  CatEx 125 PR and (Dual) IR Ex: methane,   |  |  |  |
| cCSAus  | OEx da ia IIC T4 Ga X  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  Ex da ia I Ma, Ex da ia IIC T4 Ga  Explosion protection according ATEX: EN 60079-29-1 (CatEx 125 PR, CatEx 125 PR Gas, (Dual) IR Ex, XXS H2 HC)  CatEx 125 PR and (Dual) IR Ex: methane, propane, n-nonane, etc.   |  |  |  |
| cCSAus  | OEx da ia IIC T4 Ga X  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  Ex da ia I Ma, Ex da ia IIC T4 Ga  Explosion protection according ATEX: EN 60079-29-1 (CatEx 125 PR, CatEx 125 PR Gas, (Dual) IR Ex, XXS H2 HC)  CatEx 125 PR and (Dual) IR Ex: methane, propane, n-nonane, etc. The following applies to the CatEx 125  |  |  |  |
| cCSAus  | OEx da ia IIC T4 Ga X  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  Ex da ia I Ma, Ex da ia IIC T4 Ga  Explosion protection according ATEX: EN 60079-29-1 (CatEx 125 PR, CatEx 125 PR Gas, (Dual) IR Ex, XXS H2 HC)  CatEx 125 PR and (Dual) IR Ex: methane, propane, n-nonane, etc.  The following applies to the CatEx 125 PR and approved gas "n-nonane": Only in   |  |  |  |
| cCSAus  | OEx da ia IIC T4 Ga X  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  Ex da ia I Ma, Ex da ia IIC T4 Ga  Explosion protection according ATEX: EN 60079-29-1 (CatEx 125 PR, CatEx 125 PR Gas, (Dual) IR Ex, XXS H2 HC)  CatEx 125 PR and (Dual) IR Ex: 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:   |  |  |  |
| cCSAus  | OEx da ia IIC T4 Ga X  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  Ex da ia I Ma, Ex da ia IIC T4 Ga  Explosion protection according ATEX: EN 60079-29-1 (CatEx 125 PR, CatEx 125 PR Gas, (Dual) IR Ex, XXS H2 HC)  CatEx 125 PR and (Dual) IR Ex: 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  |  |  |  |
| cCSAus  | OEx da ia IIC T4 Ga X  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  Ex da ia I Ma, Ex da ia IIC T4 Ga  Explosion protection according ATEX: EN 60079-29-1 (CatEx 125 PR, CatEx 125 PR Gas, (Dual) IR Ex, XXS H2 HC)  CatEx 125 PR and (Dual) IR Ex: 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:   |  |  |  |
| cCSAus  | OEx da ia IIC T4 Ga X  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  Ex da ia I Ma, Ex da ia IIC T4 Ga  Explosion protection according ATEX: EN 60079-29-1 (CatEx 125 PR, CatEx 125 PR Gas, (Dual) IR Ex, XXS H2 HC)  CatEx 125 PR and (Dual) IR Ex: 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> / XXS O <sub>2</sub> PR)   |  |  |  |
| cCSAus  | OEx da ia IIC T4 Ga X  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  Ex da ia I Ma, Ex da ia IIC T4 Ga  Explosion protection according ATEX: EN 60079-29-1 (CatEx 125 PR, CatEx 125 PR Gas, (Dual) IR Ex, XXS H2 HC)  CatEx 125 PR and (Dual) IR Ex: 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> / XXS O <sub>2</sub> PR)  Toxic gases:   |  |  |  |
| cCSAus  | OEx da ia IIC T4 Ga X  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  Ex da ia I Ma, Ex da ia IIC T4 Ga  Explosion protection according ATEX: EN 60079-29-1 (CatEx 125 PR, CatEx 125 PR Gas, (Dual) IR Ex, XXS H2 HC)  CatEx 125 PR and (Dual) IR Ex: 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> / XXS O <sub>2</sub> PR)  Toxic gases: EN 45544-1, EN 45544-2, EN 45544-3  |  |  |  |
|   | Approx. 495 g, depending on sensor co Approx. 550 g, depending on sensor co Durable two-component housing High-contrast colour display  -20 °C to 50 °C  700 to 1,300 hPa (measuring function) 800 to 1,100 hPa (use in explosion-hazato 10 to 90 % (short-term up to 95 %) r.h. Visual:  Acoustic  Vibration  IP 68  Lithium-ion battery, rechargeable, induct With CatEx and 3 EC sensors  With IR and 3 EC sensors  With 3 EC sensors  With CatEx, PID and 3 EC sensors  With IR, PID and 3 EC sensors  With CatEx-, IR- and 3 EC sensors  PID only  Typically 4 hours after use during a shift Typically <60 seconds for standard sensors  24 MB, e.g. at 10 minutes per hour of g the second on all 7 channels: approx. 40 Max. hose length 45 m  Marking Explosion Protection: |  |  |  |

## Technical Data

|                         | Directives                   | 2014/34/EU (ATEX)             |  |
|-------------------------|------------------------------|-------------------------------|--|
|                         |                              | 2014/30/EU (EMV)              |  |
|                         |                              | 2011/65/EU (RoHS)             |  |
|                         |                              | 2014/90/EU (MED)              |  |
|                         | Marine Approval              | DNV GL                        |  |
| Manufacturer's warranty | 3 years for the device       |                               |  |
|                         | 1 year for the power supply  |                               |  |
|                         | Sensors: see DrägerSensor® & | Portable Instruments Handbook |  |

# Ordering Information

| Dräger X-am® 8000   |  |  | Order no.   |             |   |
|---|--|--|---|-------------|---|
| Dräger X-am® 8000   |  |  | 83 25 80  | 0           |   |
| consists of: Device with pow  | er supply (Lithiu  | um-ion battery), da  | ata logger, shoulder  |             |   |
| strap, manufacturer's certific  | ate, certificate o   | of calibration, and  | charger (optional). A fully   |             |   |
| functioning device requires (   | up to 5 sensors  | and an optional in   | itegrated pump.   |             |   |
| Instruction for use included  | as standard in th  | he following langu   | ages:   |             |   |
| DE, EN, FR, ES, PT, IT, NL,   | RU, ZH, JA   |  |   |             |   |
| Instruction for use on reques   | st (please indica  | ate when ordering)   | ), also available in the  | 90 33 65    | 6                                       |
| following languages: DA, FI,  | NO, SV, PL, H  | R, SL, SK, CS, B   | G, RO, HU, EL, TR, KO   |             |   |
| nstructions for use on reque  | est also available   | e in the following I   | anguages: LT, LV, ET  | 93 00 10    | 8                                       |
|   |  |  |   | available   | as download on the website:             |
|   |  |  |   | www.drae    | eger.com/ifu                            |
| Technical handbook availabl   | e in the followin  | g languages: DE,   | EN, FR, ES, RU  | 90 33 66    | 5                                       |
|   |  |  |   | available   | as download on the website:             |
|   |  |  |   | www.drae    | eger.com/ifu                            |
| Selectable device options w   | hen ordering   | Integrated pump  | with pump adapter   |             |   |
|   |  | Bluetooth® mod   | ule   |             |   |
| RFID transponder  |  | er   |   |             |   |
|   |  | (The charging c  | radle/power plug can be de  | selected du | ring the ordering process.)             |
| Slot 1:   | 1: Slot 2:   |  |   | Slots 3-5   | 5.                                      |
|   |  | 0.01 =.  |   | 0.0.0       | ,,                                      |
| PID or IR sensor  |  | IR or CatEx sens   | sor   |             | emical sensors (XXS format)             |
|   | Measurin   | IR or CatEx sen  | sor<br>Resolution   |             |   |
| Sensors   | Measurin 0-100 %   | IR or CatEx sens   |   |             | emical sensors (XXS format)             |
| Sensors   |  | IR or CatEx sensing range  | Resolution  |             | emical sensors (XXS format)  Order no.  |
| Sensors<br>Cat-Ex 125 PR <sup>1, 2</sup>  | 0–100 %  | IR or CatEx sensing range LEL ol % CH4   | Resolution  |             | emical sensors (XXS format)  Order no.  |
| Sensors<br>Cat-Ex 125 PR <sup>1, 2</sup>  | 0–100 %<br>0–100 vo  | IR or CatEx sensing range  LEL  ol % CH4  LEL  | Resolution 1 % LEL  |             | Order no. 68 12 950                     |
| Sensors<br>Cat-Ex 125 PR <sup>1, 2</sup>  | 0-100 %<br>0-100 vo<br>0-100 %<br>0-100 vo   | IR or CatEx sensing range  LEL  ol % CH4  LEL  | Resolution 1 % LEL  | Electroch   | Order no. 68 12 950                     |
| Sensors<br>Cat-Ex 125 PR <sup>1, 2</sup><br>Cat-Ex 125 PR Gas <sup>1</sup>  | 0-100 %<br>0-100 vo<br>0-100 %<br>0-100 vo   | IR or CatEx sensing range  LEL  OF WORLD  DEL  OF WORLD  DEL  DEL  DEL  DEL  DEL  DEL  DEL   | Resolution 1 % LEL 1 % LEL  | Electroch   | Order no. 68 12 950                     |
| Sensors<br>Cat-Ex 125 PR <sup>1, 2</sup><br>Cat-Ex 125 PR Gas <sup>1</sup>  | 0-100 % 0-100 % 0-100 % 0-100 % 0-100 %  | IR or CatEx sensing range  LEL  OF WORLD  DEL  OF WORLD  DEL  DEL  DEL  DEL  DEL  DEL  DEL   | Resolution  1 % LEL  1 % LEL  10ppm, Detection lin  | Electroch   | Order no. 68 12 950 68 13 080           |
| Sensors<br>Cat-Ex 125 PR <sup>1, 2</sup><br>Cat-Ex 125 PR Gas <sup>1</sup>  | 0-100 % 0-100 vo 0-100 % 0-100 vo 0-50000 0-100 % 0-100 vo                                       | IR or CatEx sensing range  LEL  OF WORLD  OF W | Resolution  1 % LEL  1 % LEL  10ppm, Detection lir 1 % LEL  0.1 vol % CH <sub>4</sub>   | Electroch   | Order no. 68 12 950 68 13 080           |
| Sensors<br>Cat-Ex 125 PR <sup>1, 2</sup><br>Cat-Ex 125 PR Gas <sup>1</sup>  | 0-100 % 0-100 vo 0-100 % 0-100 vo 0-50000 0-100 % 0-100 vo                                       | IR or CatEx sensing range  LEL  IN CH4  LEL  IN CH4  I | Resolution  1 % LEL  1 % LEL  10ppm, Detection lir 1 % LEL  0.1 vol % CH <sub>4</sub>   | Electroch   | Order no. 68 12 950 68 13 080           |
| Sensors<br>Cat-Ex 125 PR <sup>1, 2</sup><br>Cat-Ex 125 PR Gas <sup>1</sup>  | 0-100 % 0-100 vo 0-100 % 0-100 vo 0-50000 0-100 % 0-100 vo Propane,                              | IR or CatEx sensing range  LEL  IN CH4  LEL  IN CH4  I | Resolution  1 % LEL  1 % LEL  10ppm, Detection lin 1 % LEL  0.1 vol % CH <sub>4</sub>   | Electroch   | Order no. 68 12 950 68 13 080           |
| Sensors  Cat-Ex 125 PR1, 2  Cat-Ex 125 PR Gas1  Dual IR Ex/CO <sub>2</sub> ES 1   | 0-100 % 0-100 vo 0-100 % 0-100 vo 0-50000 0-100 % 0-100 vo Propane,                              | IR or CatEx sensing range  LEL  of % CH4  LEL  of % CH4  ppm CH4L  LEL  of % Methane,  Ethene, n-Butane  6 CO2   | Resolution  | Electroch   | Order no. 68 12 950 68 13 080           |
| Sensors  Cat-Ex 125 PR <sup>1, 2</sup> Cat-Ex 125 PR Gas <sup>1</sup> Dual IR Ex/CO <sub>2</sub> ES <sup>1</sup>  | 0-100 % 0-100 vo 0-100 vo 0-100 vo 0-50000 0-100 vo 0-100 vo 0-50000 0-100 vo Propane, 0-5 vol % | IR or CatEx sensing range  LEL  of % CH4  LEL  of % CH4  ppm CH4L  LEL  of % Methane,  Ethene, n-Butane  6 CO2   | Resolution  1 % LEL  1 % LEL  10ppm, Detection lin  1 % LEL  0.1 vol % CH <sub>4</sub> 0.01 vol % CO <sub>2</sub> or  50 ppm CO <sub>2</sub>                                    | Electroch   | Order no. 68 12 950 68 13 080 68 51 880 |
| Sensors  Cat-Ex 125 PR <sup>1, 2</sup> Cat-Ex 125 PR Gas <sup>1</sup> Dual IR Ex/CO <sub>2</sub> ES <sup>1</sup>  | 0-100 % 0-100 vo 0-100 vo 0-100 vo 0-50000 0-100 vo 0-100 vo Propane, 0-5 vol % 0-100 vo         | IR or CatEx sensing range  LEL  I % CH4  LEL  I % CH4  DI % CH4  Ppm CH4L  LEL  I % Methane,  Ethene, n-Butane  6 CO2  | Resolution  1 % LEL  1 % LEL  10ppm, Detection lin  1 % LEL  0.1 vol % CH <sub>4</sub> 0.01 vol % CO <sub>2</sub> or  50 ppm CO <sub>2</sub> 1 % LEL  0.1 vol % CH <sub>4</sub> | Electroch   | Order no. 68 12 950 68 13 080 68 51 880 |
| PID or IR sensor  Sensors  Cat-Ex 125 PR <sup>1, 2</sup> Cat-Ex 125 PR Gas <sup>1</sup> Dual IR Ex/CO <sub>2</sub> ES <sup>1</sup> Dual IR Ex/CO <sub>2</sub> HC <sup>1</sup> | 0-100 % 0-100 vo 0-100 vo 0-100 vo 0-50000 0-100 vo 0-100 vo Propane, 0-5 vol % 0-100 vo         | IR or CatEx sensing range  LEL  of % CH4  LEL  of % CH4  ppm CH4L  LEL  of % Methane,  Ethene, n-Butane  of CO2  LEL  of % Methane,  Ethene, n-Butane  | Resolution  1 % LEL  1 % LEL  10ppm, Detection lin  1 % LEL  0.1 vol % CH <sub>4</sub> 0.01 vol % CO <sub>2</sub> or  50 ppm CO <sub>2</sub> 1 % LEL  0.1 vol % CH <sub>4</sub> | Electroch   | Order no. 68 12 950 68 13 080 68 51 880 |

# Ordering Information

|   | 0-100 vol % Methane,       | 0.1 vol % CH <sub>4</sub>     |                           |
|---|----------------------------|-------------------------------|---------------------------|
|   | Propane, Ethene, n-Butane  | •                             |                           |
| IR CO <sub>2</sub> ES                   | 0-5 vol % CO <sub>2</sub>  | 0.01 vol % CO <sub>2</sub> or | 68 51 882                 |
|   |                            | 50 ppm CO <sub>2</sub>        |                           |
| PID LC ppb (10.6 eV) <sup>3</sup>       | 0.05-10 ppm Isobutene      | depending on gas value,       | 68 13 500                 |
|   | 0-5 ppm Benzene            | starting with 10 ppb          |                           |
| PID HC                                  | 0-2,000 ppm Isobutene      | depending on gas value,       | 68 13 475                 |
| (10.6 eV) <sup>3</sup>                  | 0-1,000 ppm Benzene        | starting with 0.1 ppm         |                           |
| XXS O <sub>2</sub> <sup>2</sup>         | 0-25 vol %                 | 0.1 vol %                     | 68 10 881                 |
| XXS O <sub>2</sub> PR                   | 0–30 vol %                 | 0,1 vol %                     | 68 00 530                 |
| XXS O <sub>2</sub> 100                  | 0–100 vol %                | 0.5 vol %                     | 68 12 385                 |
| XXS O <sub>2</sub> /H <sub>2</sub> S LC | 0-25 vol % O <sub>2</sub>  | 0.1 vol %                     | 68 14 137                 |
|   | 100 ppm H <sub>2</sub> S   | 0.1 ppm                       |                           |
| XXS CO LC <sup>2</sup>                  | 0-2,000 ppm                | 1 ppm                         | 68 13 210                 |
| XXS CO HC                               | 0-10,000 ppm               | 5 ppm                         | 68 12 010                 |
| XXS CO / H <sub>2</sub> compensated     | 0-2,000 ppm CO             | 2 ppm                         | 68 11 950                 |
| XXS H <sub>2</sub> S LC <sup>2</sup>    | 0–100 ppm                  | 0.1 ppm                       | 68 11 525                 |
| XXS H <sub>2</sub> S HC                 | 0-1,000 ppm                | 2 ppm                         | 68 12 015                 |
| XXS CO LC / H <sub>2</sub> S LC         | 0-2,000 ppm CO/            | 1 ppm CO                      | 68 13 280                 |
| -                                       | 0-100 ppm H <sub>2</sub> S | 0.1 ppm H <sub>2</sub> S      |                           |
| XXS CO LC / O <sub>2</sub>              | 0-2,000 ppm CO/            | 1 ppm CO                      | 68 13 275                 |
| -                                       | 0–25 vol %                 | 0.1 vol % O <sub>2</sub>      |                           |
| XXS CO LC / HCN                         | 0-2,000 ppm CO             | 1 ppm CO                      | 68 00 040                 |
|   | 0-50 ppm HCN               | 0.1 ppm HCN                   | Please contact Dräger for |
|   |                            |                               | availability              |
| XXS NO                                  | 0-200 ppm                  | 0.1 ppm                       | 68 11 545                 |
| XXS NO <sub>2</sub>                     | 0-50 ppm                   | 0.1 ppm                       | 68 10 884                 |
| XXS NO <sub>2</sub> LC                  | 0-50 ppm                   | 0.02 ppm                      | 68 12 600                 |
| XXS SO <sub>2</sub>                     | 0-100 ppm                  | 0.1 ppm                       | 68 10 885                 |
| XXS PH <sub>3</sub>                     | 0-20 ppm                   | 0.01 ppm                      | 68 10 886                 |
| XXS PH <sub>3</sub> HC                  | 0-2,000 ppm                | 1 ppm                         | 68 12 020                 |
| XXS HCN                                 | 0-50 ppm                   | 0.1 ppm                       | 68 10 887                 |
| XXS HCN PC                              | 0-50 ppm                   | 0.5 ppm                       | 68 13 165                 |
| XXS NH <sub>3</sub>                     | 0-300 ppm                  | 1 ppm                         | 68 10 888                 |
| XXS CO <sub>2</sub>                     | 0–5 vol %                  | 0.1 vol %                     | 68 10 889                 |
| XXS CI <sub>2</sub>                     | 0-20 ppm                   | 0.05 ppm                      |                           |
| XXS H <sub>2</sub>                      | 0-2,000 ppm                | 5 ppm                         | 68 12 370                 |
| XXS H <sub>2</sub> HC                   | 0–4 vol %                  | 0.01 vol %                    | 68 12 025                 |
| XXS OV                                  | 0-200 ppm                  | 0.5 ppm                       | 68 11 530                 |
| XXS OV-A                                | 0-200 ppm                  | 1 ppm                         | 68 11 535                 |
| XXS Amine                               | 0–100 ppm                  | 1 ppm                         | 68 12 545                 |
| XXS Odorant                             | 0–40 ppm                   | 0.5 ppm                       | 68 12 535                 |
| XXS COCI <sub>2</sub>                   | 0–10 ppm                   | 0.01 ppm                      | 68 12 005                 |
| XXS Ozone                               | 0–10 ppm                   | 0.01 ppm                      | 68 11 540                 |
| Sensors with five-year                  | _                          |                               |                           |
| warranty                                |                            |                               | <u> </u>                  |
| XXS E CO                                | 0-2,000 ppm                | 2 ppm                         | 68 12 212                 |
| XXS E H <sub>2</sub> S                  | 0-200 ppm                  | 1 ppm                         | 68 12 213                 |
| XXS E O <sub>2</sub>                    | 0-25 vol%                  | 0.1 vol%                      | 68 12 211                 |

# Ordering Information

|      |   | _      |        |
|------|---|--------|--------|
| F.S. | = | Energy | savino |
|      |   |        |        |

HC = High concentration

| <sup>1</sup> Special calibrations possible for the Ex se      | ensors (Standard: methane).   |                              |
|---|---|------------------------------|
|   | lies to these sensors. Legal rights accruing fro  | m defects remain unaffected. |
| <sup>3</sup> To upgrade an existing instrument with PI        | D, please order also: Spare part set sensor ab  | sorber 68 13 767             |
| Power supply unit   |   |                              |
| Energy supply (incl. back housing)                            | included as standard  | 83 26 817                    |
| Zilongy cupply (illen back fleatening)                        | - Indiaded de étallidara  | 00 20 011                    |
| Charging accessories  |   |                              |
| Inductive charger for charging 1 device                       | included as standard, deselectable  | 83 25 825                    |
| Adapter for power plug  |   | 83 25 736                    |
| Power plug for charging 1 device                              | included as standard, deselectable  | 83 16 997                    |
| Power plug 100-240 VAC; 1.33 A, for charging up to 5 devices  | requires adapter (83 25 736)  | 83 21 849                    |
| Power plug 100-240 VAC; 6.25 A, for charging up to 20 devices | requires adapter (83 25 736)  | 83 21 850                    |
| 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                                      | requires adapter (00 20 700)  | 00 21 000                    |
| Vehicle mount   | requires adapter for power plug<br>(83 25 736) and vehicle connector cable<br>12/24 V DC (83 21 855)                                | 83 27 636                    |
| Kit vehicle charger   | with power supply (83 21 855), adapter (83 25 736) and mounting kit (83 27 636) – w/o inductive power unit                          | 83 28 283                    |
| Pump accessories  |   |                              |
| Dust and water filter for pump inlet                          | included in device when pump option is selected   | 83 19 364                    |
| Dust and water filter fpr pump inlet                          |   | 37 05 997                    |
| (package of 20 filter)  |   |                              |
| Pump adapter  | included in device when pump option is selected   | 83 26 820                    |
| Pump adapter "Nonane"   | Required if the measurement performance approval according to EN 60079-29-1 is required for the CatEx for measurement gas "Nonane". | 37 20 225                    |
| Accessories for Photoionisation Detector (PID)                |   |                              |
| Pre-tube holder   |   | 68 13 769                    |
| Pre-tube benzene (package, 10 tubes)                          | - <del> </del>  | 81 03 511                    |
| Pre-tube humidity (package, 10 tubes)                         |   | 81 03 531                    |
| Pre-tube activated carbon                                     |   | CH 24 101                    |
| (package, 10 tubes)   |   |                              |
| Tube opener TO 7000   |   | 64 01 200                    |
| Leather case set for photoionisation                          |   | 83 27 639                    |
| detector, incl. Leather case for the device                   |   |                              |
| PID lamp cleaning set   |   | 83 19 111                    |

# Ordering Information

| connection for filter is included in     | 83 16 530  |
|--|--|
|  |  |
| connection for filter is included in     | 83 16 533  |
| order no. 83 19 364 (dust/water filter). |  |
| connection for filter is included in     | 83 28 667  |
| order no. 83 19 364 (dust/water filter). |  |
|  | 83 25 705  |
|  | 83 25 706  |
|  | 83 25 707  |
|  | 83 28 212  |
|  | 83 25 831  |
|  | _  |
|  | 83 25 832  |
|  |  |
|  | 83 27 654  |
|  |  |
| re available. Please contact us.         |  |
|  |  |
| replaced by 37 20 224                    | 83 26 821  |
| ·  | 37 20 224  |
| -  | 83 21 893  |
|  |  |
|  | 83 21 894  |
|  |  |
|  | 83 21 882  |
|  |  |
|  | Please contact Dräger  |
|  | •  |
|  | 83 25 861  |
|  | Please contact Dräger.   |
|  |  |
|  |  |
|  | Freeware (www.draeger.com/software)  |
|  | 83 25 646  |
|  | 83 17 409  |
|  | 83 25 859  |
|  |  |
|  |  |
|  | 83 25 858  |
|  | 83 27 664  |
|  | 83 27 661  |
| Carloded as about a N                    | 83 26 828  |
| (included as standard)                   | 83 26 823  |
| - <del> </del>                           | 83 23 032  |
| (included as standard)                   | 83 26 824  |
|  | 83 27 645  |
|  | 00.07.040  |
|  | 83 27 646  |
|  | 83 27 647  |
|  | order no. 83 19 364 (dust/water filter). connection for filter is included in order no. 83 19 364 (dust/water filter). |

# at 0.4 484 | 22 05.7 | HO | PP | Subject to modifications | @ 2029 Drägerwerk AG & Co KGsA

## Ordering Information

| 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. | 83 25 874 |
| for area monitoring                       |           |
| Transponder reader for reading the        | 65 59 283 |
| integrated RFID transponder (optional)    |           |

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