



Realize the rewards of  
quality single gas detection.

DRÄGER PAC® 3500  
DRÄGER PAC® 5500  
DRÄGER PAC® 7000

## Dräger Pac Series. Gas detection you can rely on.

Wherever you are, whatever task you face, the Dräger Pac series combines fast, accurate single gas detection with ease of use and peace of mind. With clear alarms and a language-free display, each of these robust instruments uses the latest sensor technology to ensure the most reliable results.

### INNOVATIVE IN DESIGN

Small in size but huge in terms of innovation, the Dräger Pac range of single gas detectors has been developed with the needs of different industrial users and applications in mind.

Designed to withstand the toughest conditions, the impact-resistant rubber housing is impervious to corrosive chemicals and meets the requirements of IP65, ensuring consistent operation even when projected with water. This robust housing also features a stainless steel crocodile clip which fastens the instrument securely to the wearer's clothing and can be rotated to allow for individual preferences. Colored labels are also available to distinguish the instruments and the gas being measured from a distance.

### CLEAR RESULTS

Offering easy, single-handed operation, even when wearing gloves, each instrument provides continuous, clear results and unmistakable alarms. Language-free to avoid any misunderstandings, the large, numeric liquid crystal display is easy to see and can be back-lit in darker conditions. In addition to a vibrating alarm and an audible, multi-tone signal, the instrument emits a clear, 360°

visual alarm via bright, flashing LEDs at the top and base of the instrument.

### LATEST TECHNOLOGY

The highest quality in gas detection is assured through the use of the latest miniature Dräger XXS sensors. Offering longevity and fast reaction times, the sensors have been carefully positioned to allow gas to be detected at both the top and the front of the unit. Should the instrument be inadvertently placed inside a pocket, or one of the two gas inlets accidentally covered, the Dräger Pac series can still be relied upon for gas detection.

With adjustable bump test and calibration intervals to suit specific applications, these rugged instruments also feature a number of event logging capabilities.

# Safety by Design



D-1812-2009

As a disposable single gas detector with a two-year maintenance free lifetime, the Dräger Pac 3500 is the ideal partner for those who are looking for gas detection instruments without calibration.



## Versatile and easy to use

Potentially harmful substances can be found throughout industry, endangering the respiratory system, creating toxic atmospheres and sometimes displacing oxygen altogether. Whether you are part of the production process, handling liquids or working in tanks, silos and other confined spaces, you will welcome the security that comes with reliable gas detection.

Wherever danger may lie, the Dräger Pac series is a powerful ally, continuously monitoring the ambient air to alert the user to harmful gases.

Requiring minimum maintenance and offering a low cost of ownership, there is a Dräger Pac instrument to suit every application.

ST-15139-2008

**DRÄGER PAC® 3500**

- Detection of carbon monoxide, hydrogen sulfide or oxygen
- 2-year instrument life
- Event logger for up to 60 events
- Warranty: 2 years
- Quick on-site bump test capabilities

ST-15140-2008

**DRÄGER PAC® 5500****All the benefits of the Dräger Pac 3500 plus**

- Unlimited instrument life
- Serviceable: Battery and sensors easily replaced  
Dust and water filters can be replaced
- Estimated sensor lifetime from 5 to 8 years

ST-1743-2005

**DRÄGER PAC® 7000****All the benefits of the Dräger Pac 5500 plus**

- Detection of carbon dioxide, sulfur dioxide, chlorine, hydrogen cyanide, ammonia, nitrogen dioxide, nitrogen monoxide, phosphine, or organic vapors
- Optional five-year warranty for H<sub>2</sub>S, O<sub>2</sub>, and CO
- Data logger – storage of concentration and events with date and time (120 hours @ 1 data set per minute)
- Adjustable TWA and STEL alarms
- Record of the peak concentration
- Automatic bump test option

## Dräger Pac® 3500 and Dräger Pac® 5500

Ideal for use in industrial personal monitoring applications, the Dräger Pac 3500 and Dräger Pac 5500 single gas detectors provide fast detection of hydrogen sulfide, carbon monoxide, or oxygen.

### MEETING DIFFERENT NEEDS

As a disposable single gas detector with a two-year maintenance-free lifetime, the Dräger Pac 3500 is the ideal partner for those who are looking for gas detection instruments without calibration. For long-term operation and more regular use, the serviceable Dräger Pac 5500 features a low cost of ownership with an unlimited instrument lifetime and long-life Dräger sensors.

### SHARED BENEFITS

Featuring a robust, impact-resistant housing with a protective rubber coating that is impervious to corrosive chemicals, these light-weight instruments provide IP65 protection and ensure reliable operation even when projected with water. With a clear, language-free, numeric liquid crystal display that avoids any misunderstandings, they are easy to use single-handedly, even when wearing gloves. They also benefit from a retroreflective keypad for improved visibility in dark environments and a rotating crocodile clip for secure fastening to the wearer's pocket or belt.

Compact in size, these handy instruments also incorporate the latest miniature Dräger XXS sensors. Ensuring gas detection even if they are inadvertently placed in a pocket or a gas inlet is covered, the sensors have been carefully positioned to allow gas ingress at both the top and front of the unit.

As well as vibrating and multi-tone audible alarms,

the instruments emit a clear, 360° visual alarm via bright, flashing LEDs at the top and base of the instrument. Other alarms include a pre and main alarm before loss of battery, and a fault alarm in case of an instrument error. A user-selectable confidence light and beep option is also available.

### BUMP TEST AND CALIBRATION

Equipped with adjustable bump test and calibration intervals, the Dräger Pac 3500 and Dräger Pac 5500 display a warning as soon as a bump test or calibration is required. Each successful test is automatically stored in the event logger. Fresh air calibration is easy to perform through a one-button confirmation during the instrument's start-up process and full calibration can be carried out in the workshop by docking the instrument on a PC. An optional automated test and calibration system is also available, together with an economical Dräger Bump Test Station.

### EVENT LOGGER

Both instruments can store up to 60 events including dates and times.

For regular users with extensive record keeping requirements, the Dräger Pac 3500 and Dräger Pac 5500 can be linked to a PC via a connecting cradle. This means that significant events such as switch on/off, gas and battery alarms, error modes, configuration changes, fresh air calibrations and bump tests can then be downloaded, printed and stored alongside other calibration and configuration data.

D-537-2009

**DrägerSensors**  
Miniature XXS sensors  
ensure fast reaction time

**Large display**  
Clear, large numeric,  
language-free LCD display

**Color code**  
Easy color coded  
identification

**Impact resistant housing**  
Resistant to impact  
and vibration

**360°**  
360° visual alarms



## Dräger Pac<sup>®</sup> 7000

Intuitive in operation and small, robust and ergonomic in design, the Dräger Pac 7000 is tailor-made for personal monitoring in the workplace. Boasting an optional five-year sensor warranty for H<sub>2</sub>S, CO and O<sub>2</sub> versions, this innovative single gas detector also offers unlimited instrument life and extensive data logging capabilities.



### RUGGED AND EASY TO USE

Ideal for use in a wide range of applications, the rugged Dräger Pac 7000 provides fast, accurate and reliable warning against harmful concentrations of CO, CO<sub>2</sub>, Cl<sub>2</sub>, HCN, H<sub>2</sub>S, NH<sub>3</sub>, NO, NO<sub>2</sub>, O<sub>2</sub>, PH<sub>3</sub>, SO<sub>2</sub> or organic vapors.

Featuring a clear liquid crystal display which continuously shows the current gas concentration in large numerals, this lightweight instrument is language-free and uses straightforward icons to display warning signals. Operated via simple, menu-driven push-button controls, it can be used single-handedly, even when wearing gloves, and is easily secured with a rotating crocodile clip. For added safety, a back-lit display allows the display and any warnings to be seen easily, even in dimly lit conditions.

# For safety and reliability

The battery and long-life sensors are easy to replace, and the impact-resistant housing offers protection against corrosive chemicals and electromagnetic effects. The Dräger Pac 7000 also meets the requirements of IP65 for dust and water ingress.

## **CLEAR ALARMS**

Should either of the two adjustable alarm thresholds be exceeded, or if oxygen levels fall below the set value, the Dräger Pac 7000 immediately issues unmistakable visual, audible and vibrating alarms. Both pre and main alarms also indicate the end of battery life and, as well as user-adjustable TWA and STEL alarms, warnings are issued to signal a device error. As and when required, the peak concentration, short term exposure limit (STEL) and time-weighted average measurement (TWA value) can all be accessed at the touch of a button.

## **SIMPLE BUMP TESTS**

With the integrated bump test mode, the Dräger Pac 7000 displays a bump test icon as soon as a bump or function test is required. Bump test intervals can be set by the user and, for maximum ease and convenience, the economical Dräger Bump Test

Station can be supplied. The no-button operation provides fast results and can be performed without any training.

## **USER-SELECTABLE OPERATION**

Available via the operating menu alongside the bump test mode, fresh air and span calibration are easy to perform and can be password protected for maximum security. Individual operating times can also be set in days, to include a calibration interval, inspection interval or individual operating time limit.

Equipped with an IR interface for connection to a PC via a connecting cradle or E-Cal system, the Dräger Pac 7000 can also be supplied with Dräger Pac Vision or Dräger CC-Vision software. This specially designed software can be used to configure different functions, as well as to carry out calibration and data downloads. The Dräger Pac 7000 automatically stores every gas concentration and event together with the respective date and time. Easily adjusted by the user, the intervals at which peak concentrations are saved are variable, and the stored data can then be downloaded via PC and/or mobile printer.

## Testing for safety

Most national regulations require that detection and warning equipment are tested regularly using a known gas concentration via a bump or function test. This test, which ensures the gas measured flows to the sensor, also verifies that the sensor is properly calibrated and that the alarms are set and working correctly. Depending on the application, the bump test may need to be performed on a daily basis and, if the bump test fails, the instrument will need to be recalibrated.

Featuring adjustable bump test and calibration intervals, the Dräger Pac series displays a warning icon as soon as a bump test or calibration is required. If the icon is ignored or a test is unsuccessful, the instrument can automatically display an “out of order” error message. As an option, users can also select this same error message to indicate that the calibration interval has expired.

### DRÄGER BUMP TEST STATION

To ensure that bump tests are performed quickly and easily, the Dräger Pac series can be supplied with the Dräger Bump Test Station. Extremely quick to operate and requiring no external power

source, this portable, economical unit can be used to check the performance of both the instrument and the sensor, practically anywhere and any time, without the need of a PC.

Bump tests can take less than 10 seconds and each successful test is automatically stored in the data logger. Unsuccessful tests render the instrument “out of order”. Unsuccessful tests are also recorded and can then be automatically calibrated using the bump test station.

The optional Dräger Mobile Printer is available for those applications where immediate hard copies





are required. This printer also stores the results ready for downloading into a network or PC using Dräger CC-Vision software.

#### **CALIBRATION MADE EASY**

For those who are using large numbers of gas detection instruments on a regular basis, the cost-effective Dräger E-Cal automatic test and calibration station allows several instruments to be tested and calibrated simultaneously with extensive data and fleet management capabilities.

This flexible system uses a PC, a Master Station and up to 10 different modules to automatically test

and calibrate instruments with two, six or twelve different gases. Once a test has been completed successfully, the results are shown on both the module and the PC, and can be stored, archived and printed as required.

The modular design means that the Dräger E-Cal can be expanded and converted quickly and easily to suit different instruments and to meet specific needs. By using an optional PC adaptor, for instance, individual modules can be calibrated manually, independent of the Master Station, to perform low cost bump tests.



## Dräger sensors – at the forefront of safety

It is no accident that over half a million organizations around the world trust DrägerSensor® technology. Synonymous with safety and quality for over 100 years, our systems have been 100% developed by Dräger, and our commitment to constant improvement has brought about highly advanced technology, including the innovative Dräger XXS sensors.

### OUTSTANDING PERFORMANCE

Offering a low cost of ownership, Dräger sensors are able to detect the widest range of gases and vapors and provide the utmost accuracy and reliability in the toughest of conditions. Resilient in use, they are also built to last with the CO, H<sub>2</sub>S and O<sub>2</sub> versions offering an expected lifespan from 5 to 8 years.

The unique internal pressure compensation makes the Dräger XXS sensors robust against environmental variations in barometric pressure, temperature or humidity.

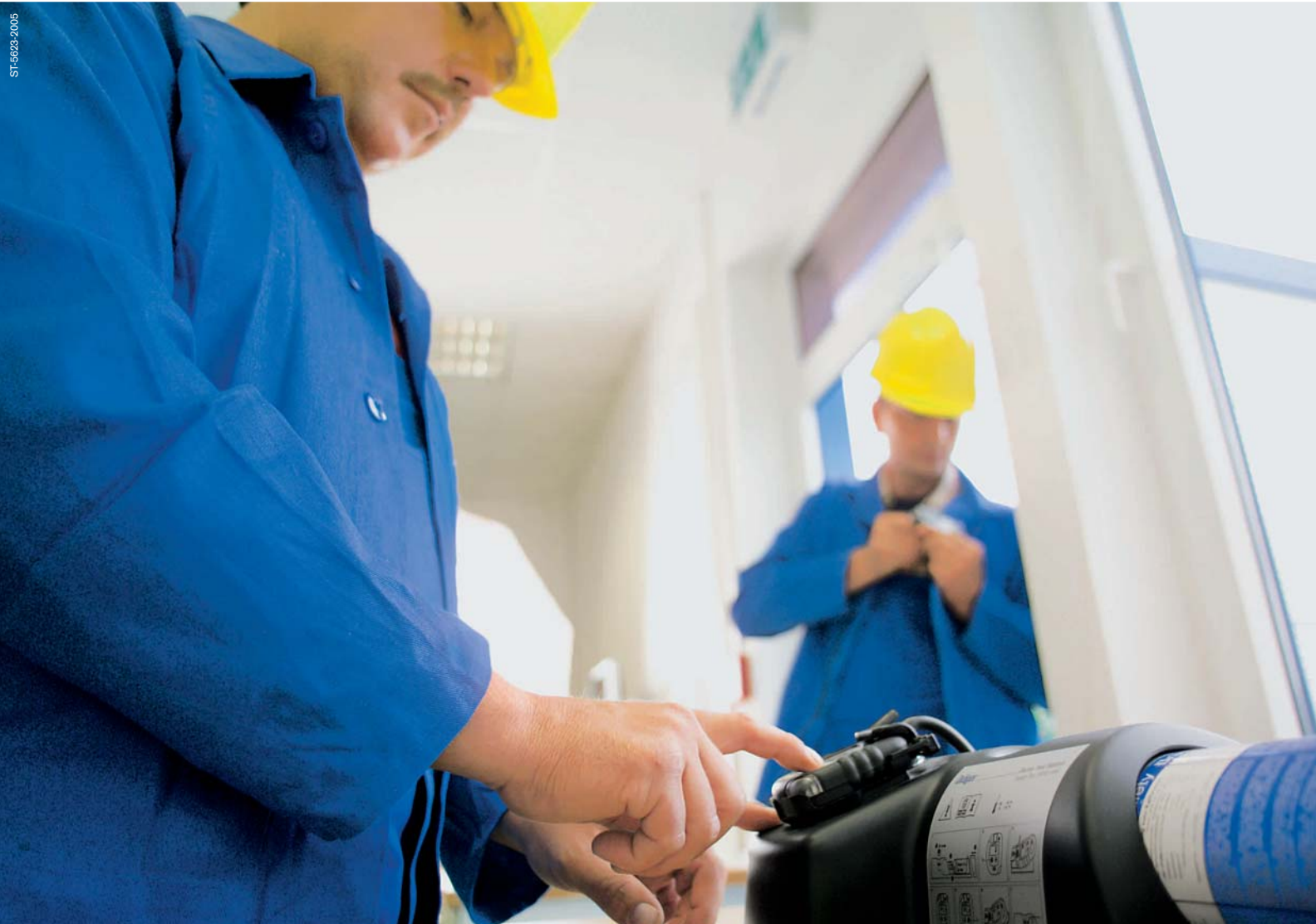
Unmatched in terms of performance and longevity, Dräger XXS sensors form the heart of the Dräger Pac series. Miniature in size, these specially designed electrochemical sensors have transformed gas detection instrumentation, allowing powerful, reliable detection in instruments that are as small as a mobile phone. Highly sensitive to the gases being monitored, they offer long-term stability and quick response times to provide the user with reliable and prompt warning against dangerous gases.

By working closely with our customers we understand the varied needs of different workplace environments and recognize that not every instrument is used in exactly the same way. We also realize that user safety is the primary concern. For this reason, the Dräger Pac series incorporates several innovative features that match ease of use with reliable safety.

A typical example is the fact that we have carefully positioned each sensor inside the instrument to allow gas ingress from both the top and the bottom. This means that, even if the instrument is placed inside a pocket or a gas inlet is covered, the user can still be confident that gas concentrations are being measured effectively.

### COMPACT IN SIZE, IMPRESSIVE IN USE

Packed with outstanding features that contradict their small size, Dräger Pac series instruments can be operated with minimal training, making them ideal for use by your own personnel as well as third party contractors. Providing accurate protection as soon as they are switched on, they guide the user through the menu-driven program, clearly identifying and, in some cases, rectifying user errors.



# Quality operation

Model	Dräger Pac® 3500	Dräger Pac® 5500	Dräger Pac® 7000
Protects against	H <sub>2</sub> S, CO, O <sub>2</sub>	H <sub>2</sub> S, CO, O <sub>2</sub>	CO, CO <sub>2</sub> , Cl <sub>2</sub> , HCN, H <sub>2</sub> S, NH <sub>3</sub> , NO, NO <sub>2</sub> , O <sub>2</sub> , PH <sub>3</sub> , SO <sub>2</sub> or organic vapors
Instrument life	2 years	Unlimited	Unlimited
Event logger	60 events	60 events	120 hours @ 1 data set/minute
Battery life H <sub>2</sub> S, CO	8 hrs/day 2 years	8 hrs/day 2 years	5500 hrs
Battery life O <sub>2</sub>	8 hrs/day 1 year	8 hrs/day 1 year	2700 hrs
Bump test	Pushing the OK-button 3 times	Pushing the OK-button 3 times	Automatic

## LOW MAINTENANCE, LOW COST

Requiring minimum maintenance, the Dräger Pac series combines the latest sensor technology with robust housing and outstanding reliability and accuracy to ensure a low cost of ownership. As well as the long sensor and instrument lifetimes, the Dräger Pac series is also designed with lasting power at its core. Using minimum battery power each instrument can be operated at low cost, day after day, week after week, and month after month.

## VERSATILE, EFFECTIVE PERFORMANCE

Easy to use and with a host of modular accessories, the versatile Dräger Pac series is designed to suit every type of user in a multitude of applications. Ideal for occasional use as well as long-term, more regular applications, this robust product range also caters to the needs of high volume users working in hazardous environments every day of their lives. This means that the most appropriate instrument can be specified to suit the task as well as the budget.

## DESIGNED TO SUIT YOUR NEEDS

“Fast, accurate and reliable”. These three words

sum up the essential requirements of a personal gas detector. Add the words “small”, “easy to use” and “low cost of ownership”, and the very best in personal protection comes to the fore.

As a result of its innovative sensor technology and compact, robust, ergonomic design, the Dräger Pac series places each of these benefits at your fingertips – suiting your needs as well as your pocket.

## THE DRÄGER PAC® SERIES – AT A GLANCE

- Lowest cost of ownership
- Quick bump test station
- Unlimited instrument life (Dräger Pac 5500 and 7000, 2 years for Dräger Pac 3500)
- Long-life Dräger XXS sensors
- Internal pressure compensation
- Event and data logging capabilities
- Retroreflective keypad
- Robust housing – impact and chemical resistant
- Gas access at top and front
- IP65 ingress protection
- Color coded for easy identification

**HEADQUARTERS:**

Dräger Safety AG & Co. KGaA  
Revalstrasse 1  
23560 Lübeck, Germany

[www.draeger.com](http://www.draeger.com)

**SUBSIDIARIES:****AUSTRALIA**

Draeger Safety Pacific Pty. Ltd.  
Axxess Corporate Park  
Unit 99, 45 Gilby Road  
Mt. Waverley, Vic 3149  
Tel +61 3 92 65 50 00  
Fax +61 3 92 65 50 95

**CANADA**

Draeger Canada Ltd.  
7555 Danbro Crescent  
Mississauga, Ontario L5N 6P9  
Tel +1 905 821 89 88  
Fax +1 905 821 25 65

**P. R. CHINA**

Beijing Fortune Draeger  
Safety Equipment Co., Ltd.  
Yu An Lu A 22, B Area  
Beijing Tianzhu Airport  
Industrial Zone  
Houshayu Shunyi District  
Beijing 101300  
Tel +86 10 80 49 80 00  
Fax +86 10 80 49 80 05

**FRANCE**

Dräger Safety France SAS  
3c route de la Fédération, BP 80141  
67025 Strasbourg Cedex 1  
Tel +33 3 88 40 59 29  
Fax +33 3 88 40 76 67

**MEXICO**

Draeger Safety S.A. de C.V.  
Av. Peñuelas No. 5  
Bodega No. 37  
Fraccionamiento Industrial  
San Pedrito  
Querétaro, Qro México  
Tel +52 442 246-1113  
Fax +52 442 246-1114

**NETHERLANDS**

Dräger Safety Nederland B.V.  
Edisonstraat 53  
2700 AH Zoetermeer  
Tel +31 79 344 46 66  
Fax +31 79 344 47 90

**REP. OF SOUTH AFRICA**

Dräger South Africa (Pty) Ltd.  
P.O.Box 68601  
Bryanston 2021  
Tel +27 11 465 99 59  
Fax +27 11 465 69 53

**SINGAPORE**

Draeger Safety Asia Pte. Ltd.  
67 Ayer Rajah Crescent # 06 03  
139950 Singapore  
Tel +65 68 72 92 88  
Fax +65 67 73 20 33

**SPAIN**

Draeger Safety Hispania S.A.  
Calle Xaudaró 5  
28034 Madrid  
Tel +34 91 728 34 00  
Fax +34 91 729 48 99

**UNITED KINGDOM**

Draeger Safety UK Ltd.  
Blyth Riverside Business Park  
Blyth, Northumberland NE24 4RG  
Tel +44 1670 352-891  
Fax +44 1670 356-266

**USA**

Draeger Safety, Inc.  
101 Technology Drive  
Pittsburgh, PA 15275  
Tel +1 412 787 83 83  
Fax +1 412 787 22 07