

# Dräger Pac<sup>®</sup> 7000 Single Gas Monitors



Small and robust, ergonomic and intuitive, economic and powerful – the Dräger Pac 7000 is tailor-made for personal monitoring at the workplace. This innovative single gas detector is equipped with a wide range of functions and is suitable for many different applications in day-to-day industrial settings. The detector is an impressive instrument, offering a high level of reliability and rapid warning against harmful concentrations of CO, H<sub>2</sub>S, O<sub>2</sub>, NH<sub>3</sub>, Cl<sub>2</sub>, SO<sub>2</sub>, PH<sub>3</sub>, NO<sub>2</sub>, HCN and CO<sub>2</sub>.

### Small and rugged

With its handy, pocket-sized design, Dräger Pac 7000 is tailor-made for personal monitoring in daily work activities. The rubber over molded case provides great protection from drops and jolts and is resistant to corrosive chemicals. Dräger Pac 7000 is dust proof and water resistant, meeting the requirements of IP 65. The unit is very resistant to interference from radio signals and other electronic noise.

A strong, tough, stainless steel crocodile clip allows the instrument to be fastened securely anywhere. The clip can be rotated to the best position for user comfort. The dual alarm LED's are positioned on opposite corners of the instrument for assured visibility. Battery and sensor replacement are easy and ensure a long instrument life.

### Display

The concentration is displayed continuously in large, easy to read numbers. The display uses no written text (language independent), showing all information in the form of large numerals or symbols. During an alarm, or on the push of a button, the display is backlit for better readability. Distinct icons are used to give status information and provide details on instrument functions. In addition, the peak concentration, time weighted average concentration (8-hour

TWA value) and short-term exposure limit (15-minute STEL) for the measurement period are readily accessed.

### New sensor technology

Dräger Pac 7000 boasts the latest XXS DraegerSensor<sup>®</sup> technology, combining smaller size with high performance. Response time is very fast due to the short diffusion paths and the extremely quick electrochemical reaction times of these new sensors. The sensor is mounted in the unit so gas can enter from both the top and the front of the monitor. This positioning minimizes the possibility of the gas inlet being accidentally covered.

### Alarm/warning functions

Along with the strong internal vibrating alarm, attention getting visual and audible alarms are triggered if the user adjustable alarm thresholds are exceeded. A two-tone audible alarm is used to maximize notification. The Dräger Pac 7000 features adjustable TWA and STEL alarms as well. A warning is also given near the end of the battery life or in the event of an error.



ST11768-2005

Dräger Pac 7000  
Large concentration display

### Bump test mode

Personnel safety is always first priority. Their safety depends on measurement and warning equipment functioning properly. Bump Testing (or Verification of Calibration) is the recommended and often mandated method for regular testing of gas detection instruments.

Dräger Pac 7000 is equipped with an optional bump test mode, which can be user activated by a PC. If a bump test is required at a user selected interval, a notice icon appears on the screen. The unit must pass the bump test using a known gas concentration before it can be used. If the unit fails the bump test, the display indicates this fact. The result of the bump test is saved in the instrument's memory and can be downloaded later to a PC for central documentation. The Dräger Bump Test Station is available for fast, easy performance of the bump test.

### Calibration and configuration

The bump test mode, fresh air calibration and span calibration can be accessed via the keypad. Access to fresh air and span calibration can be password-protected. The instrument is equipped with an IR interface and can be linked to a PC via the connecting cradle or E-Cal system. Dräger PacVision or CCVision® software installed on the PC enables automated documentation of instrument configuration, testing and calibration as well as download of any stored data. This allows you to manage the maintenance and logistics functions of your gas monitoring fleet. In addition, a timer can be set (in days) to prompt a calibration interval, inspection interval or set the instrument operating time.

### Data logger

Dräger Pac 7000 features a data logger which stores all concentrations and events along with their respective dates and times at intervals selected by the user. If a one-minute interval is set, the data logger has a capacity of five days. The stored data can be downloaded via a PC and Dräger GasVision®, PacVision® or Dräger CCVision software and viewed using Microsoft® EXCEL® software or Dräger GasVision® software.

**DrägerSensors**  
New XXS Sensors react extremely quickly

**Large display**  
Clearly structured, scratch-proof display showing all information at a glance

**Robust housing**  
Impact-resistance and ergonomic design

Actual Size Show



## Dräger Pac 7000 at a glance

- Gas inflow from top and front
- Unlimited instrument life
- Easy sensor replacement
- Simple display (language independent)
- Continuous concentration display
- Dual visual alarms
- Audible alarm
- Vibration alarm
- Two adjustable concentration alarm thresholds
- Adjustable TWA alarm
- Adjustable STEL alarm
- Display of peak, TWA, STEL concentrations on demand
- Battery pre- and main alarm
- Adjustable operating time with pre- and main alarm
- Adjustable bump test interval
- Adjustable bump test mode
- Password-protected menu for fresh air and span calibration
- IR interface for PC link
- Individual instrument configuration
- Easily replaceable battery
- Datalogger standard

For more information:  
[www.draeger.com](http://www.draeger.com)



Dräger Pac 7000:  
 Reliable in daily use.

## ORDERING INFORMATION

Description	Measuring Range	Alarm Threshold A1	Alarm Threshold A2	Order Code
Dräger Pac 7000 CO	0 to 1999 ppm	35 ppm	50 ppm	83 18 970
Dräger Pac 7000 H <sub>2</sub> S	0 to 100 ppm	10 ppm	20 ppm	83 18 971
Dräger Pac 7000 O <sub>2</sub>	0 to 25 Vol.-%	19.5 Vol.-%	23.5 Vol.-%	83 18 972
Dräger Pac 7000 CO <sub>2</sub>	0 to 5 Vol.-%	0.5 Vol.-%	3 Vol.-%	83 18 975
Dräger Pac 7000 Cl <sub>2</sub>	0 to 20 ppm	0.5 ppm	1 ppm	83 18 978
Dräger Pac 7000 HCN	0 to 50 ppm	10 ppm	20 ppm	83 18 973
Dräger Pac 7000 NH <sub>3</sub>	0 to 300 ppm	50 ppm	100 ppm	83 18 979
Dräger Pac 7000 NO <sub>2</sub>	0 to 50 ppm	5 ppm	10 ppm	83 18 977
Dräger Pac 7000 PH <sub>3</sub>	0 to 20 ppm	0.1 ppm	0.2 ppm	83 18 974
Dräger Pac 7000 SO <sub>2</sub>	0 to 100 ppm	1 ppm	2 ppm	83 18 976



Dräger Pac 7000:  
 High level of wearing comfort.

## ACCESSORIES

Connecting Cradle, complete with USB cable and Dräger PacVision® software	83 18 587
Lithium battery	45 43 808
Dust and water filter (4 per pkg)	45 43 836
Leather carrying case	45 43 822
Bump Test Station, gas cylinder 58 L	83 17 410
E-Cal instrument module for connection of 4 Dräger Pac 1000 to 7000 to a Dräger E-Cal Master Station or to Module Adapter	83 18 589

## TECHNICAL DATA

Dimensions (H x W x D)	64 x 84 x 20 (battery compartment: 25 mm) (2.5 x 3.3 x 0.8 in., battery compartment: 1 in.)	
Weight	120 g (3.8 oz.)	
Ambient conditions	Temperature <sup>(1)</sup>	-30 to 50 °C (-20 to 120 °F)
	Pressure	700 to 1,300 hPa (0.7 to 1.3 Atm.)
	Humidity	10 to 90 % r. h.
Ingress protection	IP 65	
Display	Language-free LCD concentration display, continuous indication of concentration, indication of concentration during alarm, peak concentration, TWA- and STEL- concentration, operating time, notice and warning functions	
Operating time (typical at 25 °C)	2 years	
Battery life (typical at 25 °C, 24 hours per day, 1 minute alarm per day)	CO, H <sub>2</sub> S, others	> 5,500 hours
	O <sub>2</sub>	> 2,700 hours
Audible alarm	Two-Tone-Alarm, typical > 90 dB (A), at a distance of 30 cm	
Visual alarm	Two high-intensity LED's	
Tactile alarm	Powerful internal vibration	
Data logger	Storage of concentration and events with date and time	
Approvals	CE-Sign	(89/336/EEC, 94/9/EC)
	ATEX	I 1 G EEx ia IIC, T4
		I M 1 EEx ia I, T4
	UL	Class I, II Div 1, Group A, B, C, D, E, F, G, Temp. Code T4
	cUL	Class I, II Div 1, Group A, B, C, D, E, F, G, Temp. Code T4
	IECEX	EEx ia IIC, T4
MSHA	Permissible Gas Monitor	

1) Dräger Pac 7000 CO <sub>2</sub>	-20 to 40° C (-4 to 104° F)
Dräger Pac 7000 HCN	-20 to 50° C (-4 to 122° F)
Dräger Pac 7000 PH <sub>3</sub>	-20 to 50° C (-4 to 122° F)



DRAEGER SAFETY, INC.  
101 Technology Drive  
Pittsburgh, PA 15275-1057  
USA  
Tel 1-412-787-8383  
Fax 1-412-787-2207  
www.draeger.com

CUSTOMER SERVICE  
Tel 1-800-858-1737  
Fax 1-800-922-5519

TECHNICAL SERVICES  
Tel 1-888-794-3806  
Fax 1-888-794-3807

DRAEGER SAFETY CANADA LTD.  
7555 Danbro Crescent  
Mississauga, ON L5N-6P9  
Canada  
Tel 1-905-821-8988  
Fax 1-905-821-2565

CUSTOMER SERVICE  
Tel 1-877-372-4371  
Fax 1-800-Fax-Tube

DRAEGER SAFETY S.A. DE C.V.  
Av. Peñuelas No. 5  
Bodega No. 37  
Fraccionamiento Industrial  
San Pedrito  
Queretaro, Qro. C.P. 76148  
Mexico

Tel 52-442-246-1113  
Fax 52-442-246-1114