# Dräger



Gebrauchsanweisung Руководство по зксплуатации Instructions for Use Upute za uporabu Navodilo za uporabo Notice d'utilisation ₫13 **2** 75 Instrucciones de uso Návod na použitie 章18 量80 Návod na použití Instruções de utilização ■85 **建23** Istruzioni per l'uso Ръководство за работ 量90 **28** Настанова з експлуатаціїх Gebruiksaanwijzing **396** ≥34 Instrucțiuni de utilizare Brugsanvisning 量102 Käyttöohjeet Használati útmutató 量107 **建44** Οδηγίες Χρήσης Bruksanvisning 皇112 書49 Kullanma talimatları Bruksanvisning

Not for sale in the US market

Instrukcja obsługi

量54

量59

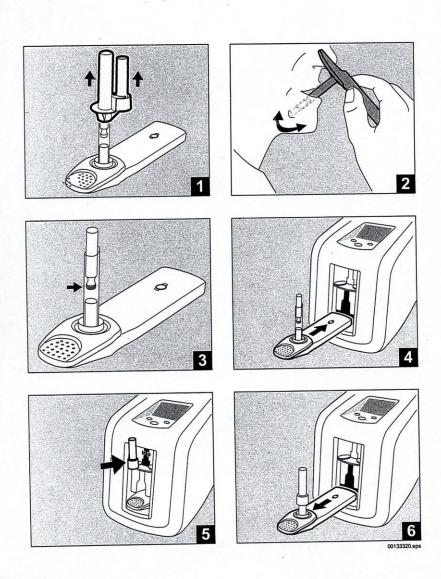
Dräger DrugTest® 5000 Analyzer



₹ 118

₫ 123

تعليمات الاس



#### 1 For your safety

## General safety notes

- Before using this product, carefully read the Instructions for Use and those of the associated products.
- Strictly followthe Instructions for Use. The user must fully understand and strictly observe the instructions. Use the product only for the purposes specified in the Intended use section of this document.
- Do not dispose of the Instructions for Use. Ensure that they are retained and appropriately used by the product user.
- Only trained and competent users are permitted to use this
- Comply with all local and national rules and regulations associated with this product.
- Only trained and competent personnel are permitted to inspect, repair and service the product. Dräger recommends a Dräger service contract for all maintenance activities and that all repairs are carried out by Dräger.
- Use only genuine Dräger spare parts and accessories, or the proper functioning of the product may be impaired.
- Do not use a faulty or incomplete product and do not modify the product.
- Notify Dräger in the event of any component fault or failure.
- What to do in case of transit damage: If the unit arrives in damaged condition, you should request an immediate inspection by the shipping company and the
  - local service representative. Dräger cannot be held responsible for any damages caused by transportation. However, Dräger does provide assistance in clarifying the incident with the carrier in question.
- Do not use this product in potentially explosive or flammable atmospheres or in areas with flammable gases. The product is not approved for use in explosive and could cause explosions in those atmospheres.

#### **Definitions of alert icons** 1.2

The following alert icons are used in this document to provide and highlight areas of the associated text that require a greater awareness by the user. A definition of the meaning of each icon is as follows:



#### CAUTION

Indicates a potentially hazardous situation which, if not avoided, could result in physical injury, or damage to the product or environment. It may also be used to alert against unsafe practices.



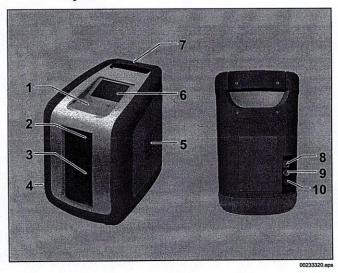
#### NOTICE

Indicates additional information on how to use the product.

#### 2 Description

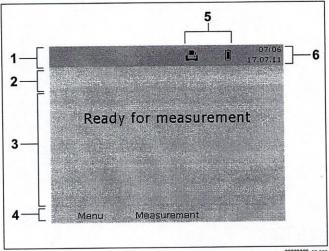
#### 2.1 **Product overview**

#### 2.1.1 Analyzer



- Operator control panel: green OK key, two blue keys
- Upper compartment (cartridge compartment) 2
- Lower-compartment (cassette compartment)
- Air outlet and IRDA for printer communication at unit side 4
- Air inlet 5
- Display 6
- Carrying handle 7
- Socket for USB cable ("USB") 8
- Socket for keyboard and bar code scanner ("PS/2")
- 10 Connection for power supply unit ("12 VDC")

## 2.1.2 Display



- Headline
- Title bar 2
- Variable section
- Operations that can be carried out with the respective key underneath
- Special symbols
- Date and time

## 2.1.3 Scope of delivery

The following components are supplied with the Dräger DrugTest® 5000 Analyzer<sup>1)</sup>:

- Dräger DrugTest 5000 Analyzer
- Battery charger power supply (12 VDC) with power cable
- Vehicle power supply cable (12 V)
- Instructions for Use

#### 2.1.4 Required but not included

Dräger DrugTest 5000 test kits used to collect and analyse samples.

#### 2.1.5 Optional equipment

Dräger offers additional accessories to expand the system such as printer, keyboard, bar code reader, carrier bag, 12V car cable, training test kits and carrying case. Please consult the order list on Page 12 for additional information.

## 2.2 Feature description

The Dräger DrugTest 5000 Analyzer prepares the sample collected with the Dräger DrugTest 5000 test kit and sets the required reaction temperature. Then it starts analysing the sample and produces a result at the end of the required reaction time. The analysis is based on an optical method used to evaluate the signal intensities of testing and control lines on the immunochemical test strip contained in the test kit.

The integrated rechargeable battery allows both stationary and portable use of the Dräger DrugTest 5000 Analyzer.

## 2.3 Intended use

The Dräger DrugTest 5000 test system consists of the Dräger DrugTest 5000 Analyzer and the Dräger DrugTest 5000 test kits. The test system is designed for the simultaneous, qualitative detection of substances or substance classes in human saliva for diagnostic purposes (in-vitro diagnostic agent) and/or forensic use.

The detectable substances are defined by the utilised DrugTest 5000 test kit.

The Dräger DrugTest 5000 test system is a qualitative measuring system to detect searched substances or their metabolites which are contained in the sample in excess of a certain concentration limit (cut-off) and therefore delivers only a preliminary analytical result (screening method). To obtain a confirmed analytical result a more specific method must be used. Gas chromatography/mass spectrometry (GC/MS) is the preferred method used in most cases.

A professional assessment of the Dräger DrugTest 5000 result is required allowing for the further clinical consideration of the test subject. This applies especially if the preliminary result is positive.

#### 2.3.1 Explanation of symbols

	Strictly follow the Instructions for Use!		
_	Manufacturer		
IVD	In-vitro diagnostic medical product		
1	Temperature limitation		
Ω	Expiry date		
A	Separate collection of electric and electronic end-of-life units		

## 3 Menu

The menu is accessed by selecting the key underneath the » Menu « area when the unit is ready to measure.

Please consult the Dräger DrugTest 5000 System technical reference manual<sup>2)</sup> for additional information.

The menu is navigated with the three unit keys to which functions are assigned as depicted in the display.

## 3.1 Menu navigation

Graphic symbols facilitate navigating the menu levels:

- Return to next higher menu level
- Closed folder:

This item contains further functions or submenus.

Open folder

The functions and sub-menus shown here are contained in this item.

Function:

If activated, functions can be executed in a single step or several steps.

Selection activated:

Press the ok key to enable functions that can be selected and activated.

## 3.2 Configuration

The unit can be connected to a PC with the integrated USB interface. This interface can be used by qualified users and the technical service of Dräger to change unit settings (e.g. for the storage of data or the individual allocation of samples). Please contact Dräger or a service organisation authorised by Dräger for additional information.

## 4 Use

#### 4.1 Prerequisites



## NOTICE

Observe the Instructions for Use of the utilised Dräger DrugTest 5000 test kits.

The Dräger DrugTest 5000 Analyzer is delivered as a fully operational unit. Initial operation does not require any prior assembly or installation.

Dräger DrugTest is a registered trademark of Dräger.

The Technical Manual can be downloaded free of charge from the Dräger home page (www.draeger.com).

## 4.2 Preparation for use

- Place the Dräger DrugTest 5000 Analyzer on a flat, firm and horizontal surface.
- · Keep all air vents uncovered and clean.
- Ensure the specified ambient conditions:
  - Ambient temperature between 5 °C and 40 °C
  - Relative humidity between 5 % and 95 % r.h.
  - When the unit is carried from a cold environment to a warmer place, condensation may occur.

    Wait for the Analyzer to adjust to the environmental temperature and make sure it is dry before activating it. Wait approximately 1.5 hours if the ambient temperature changes from -20 °C to +20 °C.
- Use any of the available accessories such as the external keyboard or set up the printer.
- Connect the battery charger if used with an external power supply, e.g. if the battery charge is insufficient.

## 4.3 Switch on Analyzer

Keep the ok key pressed until the start window appears.

After successful completion of the automatic self check, the unit displays » Ready « to indicate its readiness for operation.

## 4.4 Collecting the sample



#### NOTICE

Observe the Instructions for Use of the utilised Dräger DrugTest 5000 test kits.

## 4.5 Analysing the sample

- Make sure that Analyzer is switched on and » Ready «.
- 2. Take the test cassette with the sample from the test subject.

Open the Analyzer door and insert the test cassette into the bottom slot of the Analyzer until it audibly clicks into position (Fig 4).

- Remove safety cap from the cartridge and insert cartridge into the top slot of the Analyzer until it audibly clicks into position (Fig 5).
- 4. Close the door.

The Analyzer now automatically starts the analysis.
On completion of the analysis, the Analyzer displays the results for every tested substance on the screen.
Note the display!



#### NOTICE

Do not move the unit during the test evaluation!

A status bar on the display indicates the progress of the evaluation process. Once the evaluation process is complete, the results are displayed for each tested substance.

#### Optional:

#### 4.5.1 Entering data

 Data of the subject and user can be entered, the test result can be printed and the data can be saved by selecting the corresponding control panel keys. Follow the instructions on the display.

## 4.6 After the analysis

The unit emits an acoustic signal at the end of the analysis.

- Remove test cassette with attached cartridge from the Analyzer after the analysis and dispose of it (Fig 6).
- Close the door of the Analyzer. The analysis results are depicted on the display.

#### Optional:

- Printing the current results.
- 3. Press the ok key to confirm results.

The Analyzer is now automatically prepared for the next measurement.

## 4.7 Switching Analyzer off

 Keep the or key pressed. The unit will switch off after approx. 3 seconds. The power supply cable should remain connected to charge the battery until the unit is re-packed for transport.



#### NOTICE

To maintain the performance of the battery, please read the battery care notes, see "Battery maintenance" on Page 11.

In order to protect the optical components of the Analyzer against dust, keep the door of the Analyzer closed at all times unless you are inserting or removing test kits.

## 4.8 Operating modes

The Dräger DrugTest 5000 Analyzer has three operating modes:

#### Ready

The unit is ready to measure after switching on and running the successful self test. The three keys and the display of the unit light up.

#### Standby

After a predefined period of inactivity in ready mode, the unit switches to standby. The keys on the unit are still lit; however, the display is switched off. You can quit standby mode and return the unit to immediate ready mode by pressing any key.

#### **Automatic switch-off**

After a predefined period of inactivity in standby mode, the unit switches off automatically. It has to be switched on again before the next application.

## 4.9 State of charge of the integrated rechargeable battery

The state of charge indicator in the title bar of the display shows a symbol for the current mode (mains-operated/portable operation) and the state of charge of the integrated rechargeable battery.

#### 4.9.1 Mains operation

## Standard mode

The Analyzer is connected to an external power source.

#### Restricted mode



The internal battery is not sufficiently charged or defective. A yellow warning triangle is depicted additionally. It is now possible to operate the unit while connected to the mains power; however, it is not possible to switch to portable operation.

#### 4.9.2 Portable operation

During portable operation, a battery symbol indicates the charge status of the integrated rechargeable battery:

#### Standard mode



The battery is fully charged.



With decreasing charge, the grey fill colour in the symbol will also decrease.



The battery is almost empty once only the outline of the icon is visible and a yellow warning triangle appears is addition.

Almost discharged battery



The battery is running low, indicated by an unfilled red battery symbol.

Immediately connect the unit to the external power supply to finish the measurement and avoid data loss.

Completely discharged battery



The battery is fully discharged. This is indicated by an unfilled white battery symbol on a red background. Portable operation is not possible.

**Defective battery** 



Battery is faulty. A red "x" is displayed next to an unfilled battery symbol. Operating the Analyzer is only possible if a power supply unit is connected.



#### NOTICE

To maintain the performance of the battery, please read the battery care notes, see Section 6.3.

Additional details as well as illustrations of the state of charge symbols can be found in the Dräger DrugTest 5000 system technical reference manual.

## 5 Troubleshooting

Fault	Cause	Remedy
No screen display within 10 seconds after switching on the unit.	Battery fully discharged and no external power supply connected.	Connect battery charging power supply unit and establish mains power supply.
Acoustic warning signal and display of the message » Close door «.	The door was opened during the analysis process.	Close the door.
Acoustic warning signal and display of the message » Remove test cassette «	A test cassette was detected in the unit during the automatic self test.	Open door, remove test cassette and close door again.
Smoke development / pungent smell	Wrong battery charging power supply unit used.	Use supplied battery charging power supply unit. Contact Dräger if the problem persists.

If a problem occurs while using the unit which is not listed in this table or which cannot be solved by following the listed remedies, please contact Dräger or a service organization authorised by Dräger.

## 6 Maintenance

#### 6.1 Maintenance

The Dräger DrugTest 5000 Analyzer is a sturdy device requiring a minimum of maintenance and care.

## 6.2 Cleaning



## CAUTION

Do not immerse the unit in liquids, make sure liquids do not penetrate the connectors.

The inside of the unit must not be cleaned by users.

If necessary, clean the external surfaces of the unit with a soft cloth moistened with a gentle detergent or a commercially available lab detergent.

#### 6.3 Battery maintenance

For optimal care of the battery, the unit should always be connected to the charger and the mains power supply. The unit itself automatically takes care of the battery (trickle charge). Recharge battery immediately after use and avoid storing the unit with an incompletely charged battery.

The Analyzer is equipped with an integrated lead storage battery. The unit consumes a small standby current even when switched off, which may discharge a fully charged battery in approx. **2 months**. The battery capacity can be retained at an optimum and for the long term if prolonged periods of low charge are avoided.

To do so the following measures are required:

- Always operate the Analyzer with the AC adapter while it is not used in portable mode. A permanent connection to the mains power is not detrimental to the integrated battery but maintains its performance.
- Connect unit to the 12 V supply cable when using in vehicles.

- For portable operation with low battery indication, connect the charger and fully charge battery promptly.
- Keep the unit connected to the charger when storing.
- For long term storage of the unit without the possibility to connect the battery charger, charge the Analyzer completely before storage and fully recharge the battery every six weeks.

#### 6.4 Maintenance work

We recommend that the unit be serviced on a regular basis every 12 months.

Contact Dräger or a service organization authorised by Dräger for maintenance.

We recommend concluding a service agreement.

## 7 Disposal

Dispose of the product in accordance with the applicable rules and regulations.



Disposing of electric and electronic equipment According to Directive 2002/96/EC, this product must not be disposed of as municipal waste. It is therefore labelled with the symbol depicted here. The product can be returned to Dräger free of charge. Please contact your national Dräger Sales Organisation or Dräger for more information.

## 8 Technical data

Supplyvoltage 12 VDC (11 to 15 VDC)

Power input approx. 3 A

Dimensions 200 mm x 250 mm x 220 mm

 $(W \times H \times D)$ 

Weight 4.5 kg (including battery)

Temperature

Operation 5 °C to 40 °C Storage and transport -20 °C to 60 °C

Humidity range 5 to 95 % r. h., non-condensing

Ports optical IRDA (printer),

PS/2 (for external keyboard or

scanner),

USB Slave (for communication with

a PC)

Measurement duration depends on test kit,

four minutes and 15 seconds to eight

minutes and 30 seconds

Storage capacity 500 data sets with test results

## 9 Order list

Name and description	Part number
Dräger DrugTest 5000 Analyzer including battery charger supply unit, vehicle supply cable, mains cable and Instructions for Use	83 19 900
Keyboard, compact (PS/2, dimensions approx. 28.2 x 13.2 x 2.4 cm):	
"QWERTZ" – key assignment German	83 15 095
"QWERTY" – key assignment English	83 15 497
"AZERTY" – key assignment French	83 15 142
Dräger Mobile Printer	83 19 310
Paper for Dräger Mobile Printer (5 rolls)	83 19 002
Carrier bag Dräger DrugTest 5000 Analyzer	83 23 675
Transport case	83 19 925
Charger power supply cable (12 V) with mains cable for EU, UK, USA, AUS	83 15 675
Vehicle supply cable (12 V) Power cable from car on-board/cigarette lighter socket to Dräger DrugTest 5000 Analyzer	83 12 166
USB connection cable for communication with a PC	AG 02 661
Barcode scanner	AG 02 491
Dräger DrugTest 5000 test kits, e.g.:	
Dräger DrugTest 5000 test kit, 6-panel Package with 20 pieces	83 19 830
Dräger DrugTest 5000 training test kit Package with 20 pieces	83 19 970
Dräger DCD 5000 Sample transportation and storage container with integrated sample collection.	83 19 910
Dräger SSK 5000 Collection and analysis of surfacesamples	83 20 490
Dräger DrugTest 5000 System Technical Handbook	90 23 950 www.draeger.com
Dräger Diagnostics Software for Analyzer configuration	www.draeger.com



Directive 98/79/EC



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