

Product description
and
Operating manual

Précise
1100 S

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1 Introduction

1.1 Intended use

Précise 1100 S is a measuring device operated by a rechargeable battery. It is intended for determination of the oxygen content in percent, for flow measurements near the outlet of oxygen concentrators and for pressure measurement of non-aggressive gases.

Important notice !

Précise 1100 S is not to be used for monitoring life preservation systems.

The oxygen content measurement is only to be conducted in an oxygen – nitrogen-gas mixture (e.g. oxygen concentrator).

1.2 Functional characteristics

A ultrasonic detector is used for the oxygen content and flow measurement. This sensor doesn't need to be recalibrated, but Medicap homecare recommends to operate a technical measurement control once a year.

The oxygen content measurement is based on the different transit times of sound in oxygen and nitrogen.

During the flow measurement the different transit times of sound in the direction of flow and against it are analysed.

The pressure measurement is performed by a load cell.

1.3 Important notices for operation and safety

Being acquainted with and following this manual is a condition for the operation of **Précise 1100 S** according to its intended usage.

Not to calibrate with 100% oxygen!

Précise 1100 S and all accessories with contact to oxygen need to be kept free of oil and fat.

Only original parts should be used.

Précise 1100 S needs to be protected against wetness and claminess.

Smoking, open light and fire are prohibited during usage.

Only for measuring on O₂-concentrator!

If the apparatus was stored at room temperatures below 10°C the device needs to adapt to the room temperature, otherwise malfunctions might turn up. **Only for measuring at room temperature.**

Medicap homecare recommends to operate a technical measurement control once a year.

2 Operation

2.1 Turning on the equipment

Before turning on **Précise 1100 S** for the first time, it should be charged with the charging set included in the delivery. Herefore connect the charging set and **Précise 1100 S**.

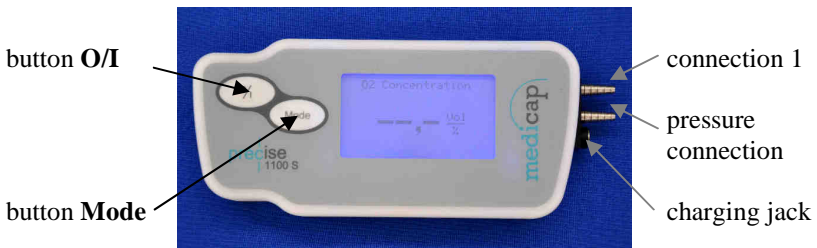


fig. 1: Front panel Précise 1100 S

In order to turn on press button **O/I** . After about 30 seconds the backlight will be turned off.

2.2 Switching of display modes

Précise 1100 S is able to display the measured value numerically as well as numerically and graphically.

The display mode may be selected via the button **Mode**.

Pressing the Mode - button	Display
0	Numerical display of oxygen content (Vol.%)
1	Numerical display of flow (l/min)
2	Numerical display of pressure value (bar)
3	Numerical display of pressure value (mmHg)
4	Numerische display of pressure value (psi)
5	Numerical and graphical display of oxygen content (Vol.%)
6	Numerical and graphical display of flow (l/min)
7	Numerical and graphical display of pressure value (bar)

2.3 Oxygen content measurement

After turning on the instrument, the display shows the current oxygen content numerically.

In order to receive a graphic display, the Mode – button needs to be pressed a few times.

If the oxygen content is less than 70,0 Vol.% , the display will show „ -- , - Vol.% “ .

Now adjust the concentrator to the desired flow. Connect the outlet of the oxygen concentrator to connection 1 of **Précise 1100 S** using the tube. The oxygen content may be read off on the display.

Please consider that with most oxygen concentrators 10 min must elapse after turning on the equipment, before a precise content measurement is possible.

A moistener may not be installed between the oxygen concentrator and **Précise 1100 S**.

2.4 Flow measurement

Connect the outlet of the oxygen concentrator to connection 1 of **Précise 1100 S** using the tube. After selecting the display mode, the flow may be read off on the display.

A moistener may not be installed between the oxygen concentrator and **Précise 1100 S**.

2.5 Pressure measurement

For the pressure measurement the pressure line needs to be connected to the pressure connection of the **Précise 1100 S** instrument.

The pressure may be displayed in bar, mmHg or psi (see 2.2. Switching of display modes).

When conducting a long duration pressure measurement, the pressure line should be fastened to the measuring device and the measurement connexion.

2.6 Turning off

The instrument is turned off by pressing the button **I/O** a second time. 5 minutes after the last actuation of the button **Précise 1100 S** will turn itself off autonomously.

2.7 Charging the accumulator

If **BAT** flashes on the display, the internal accumulator must soon be recharged. If the display permanently shows **BAT**, **Précise 1100 S** needs to be charged immediately.

For charging, connect the charging set included in the delivery to **Précise 1100 S**. **Précise 1100 S** may be charged while turned on and likewise when turned off.

If **Précise 1100 S** is turned on, **CHARGING** will show on the display. After charging has been completed, trickle charge will be performed.

3 Cleaning

The instrument should be cleaned occasionally with a dry cloth.

4 Waste disposal

In order to dispose of the instrument, it may be sent back to Medicap homecare free of charge. We will take care of an environment-friendly disposal.

The NiMH-Accumulator included in the instrument needs to be returned to Medicap homecare for an environment-friendly disposal.

Do **not** dispose of used accumulators together with domestic waste!

5 Technical Data:

Dimensions (incl. connections):	190 mm x 80 mm x 30 mm
Weight (incl. accumulator):	375 g
Electricity supply:	internal 3 NiMH ACCU external charging set
Display:	graphic LC – display blue backlight
Temperature range:	15°C - 35 °C
Pressure measuring range:	0 – 2,0 bar; +/- 1% 0 – 1500 mmHg; +/- 1% 0 – 29 psi; +/- 1%
Flow measuring range:	0 – 7,0 l/min; +/- 0,3 l/min
Oxygen content Measuring range:	70 – 98,0 Vol.%; +/- 2 %

6 Scope of delivery

1 x **Précise 1100 S** complete, including:

1x Measuring device incl. accumulator	Art.-Nr. 221.000
1x Measurement tube	Art.-Nr. 221.003
1x Operating manual	Art.-Nr. 221.004

Additionally available:

1x charging set	Art.-Nr. 221.001
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7 Warranty

We grant a two-year warranty for defects resulting from production faults or material defects commencing on the date of delivery.

Such defects will be eliminated in accordance with our terms of guarantee.

The warranty is not valid, if the instrument is not properly used in accordance with this operating manual or if work has been carried out by unauthorised service organisations or unqualified persons.

In these cases the operator is liable.

Important

The original invoice must be presented if the warranty claim is found to be justified.



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