



HAND-HELD ULTRASONIC OXYGEN ANALYZER

User Instruction

Model: RP-03



CMNTENTS

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1. Introduction

1.1 Purpose

The RP-03 is a rechargeable meter. It is used for the percentage determination of the oxygen content, the flow measurement at the outlet of oxygen concentrators and for the pressure measurement of non-aggressive gases.

1.2 Functional description

The RP-03 is used for oxygen concentration and flow measurement. This sensor does not need to be recalibrated, however we recommends conducting a metrological check once a year.

The oxygen concentration measurement is based on the different sound propagation times in oxygen and nitrogen. For the flow measurement, different sound propagation times in the flow direction and against the flow direction are evaluated.

The pressure measurement is carried out by means of a pressure measuring cell.

1.3 Important instructions for use and safety

Do not calibrate the RP-03 with 100% oxygen!

The RP-03 and all accessories that come into contact with oxygen should be kept free of oil and grease.

The RP-03 should be protected from moisture.

Smoking, fire are prohibited during use.

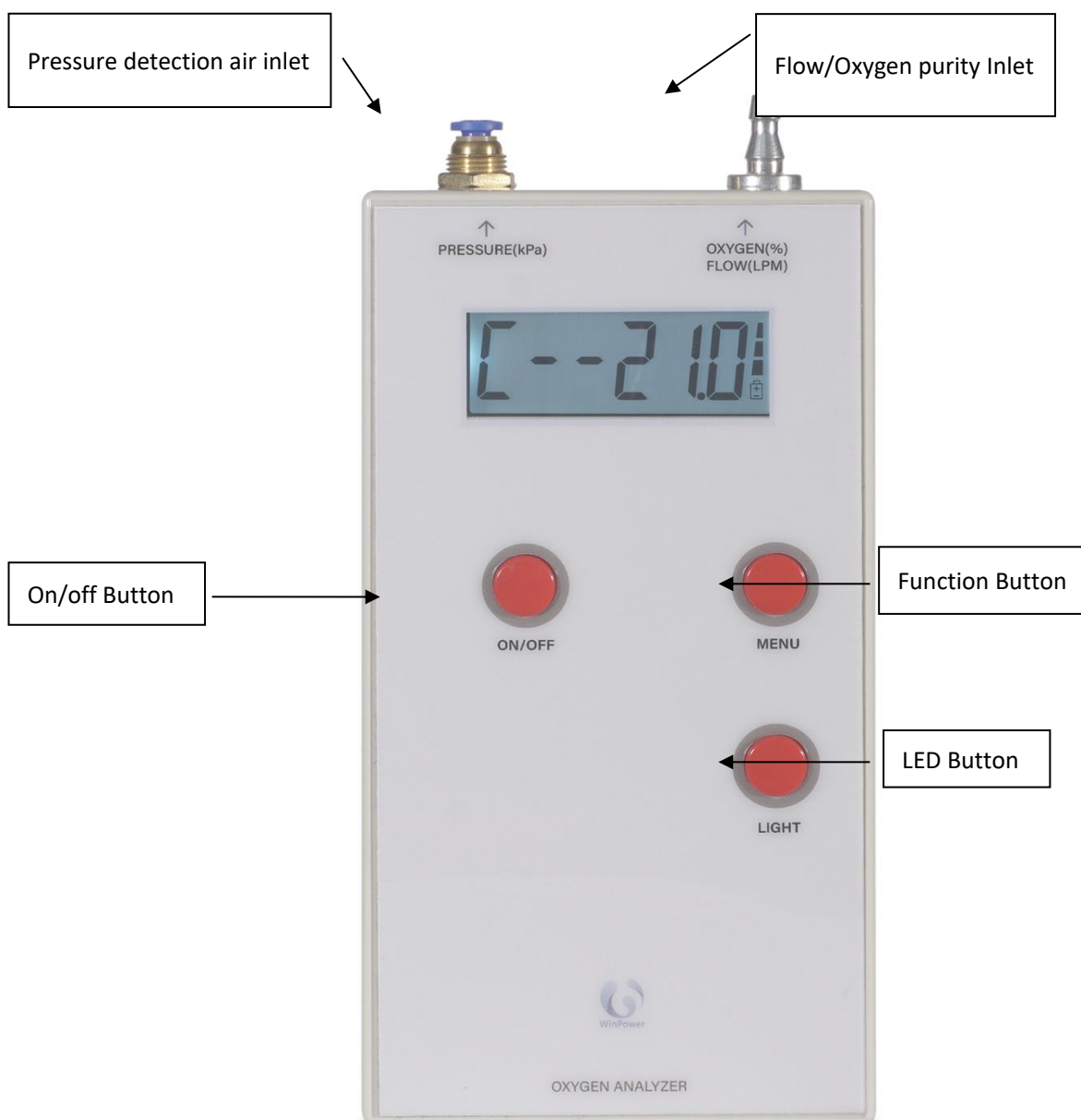
If the device has been stored at temperatures below 5 °C , the device must adjust to the room temperature, otherwise malfunctions may occur. Only measure at room temperature.

2. Operation

2.1 Switching on the device

Before switching on for the first time, the RP-03 should be charged using a charger. To do this, connect the charger and the RP-03.

To switch on, press the Power button.



2.2 USE INSTRUCTIONS

1. Press the Power button. Turn on the oxygen analyzer;

NOTE: After turn on the analyzer, if you don't use, it will turn off after approximately 3 minutes by automatically. It can save power;

2. The LCD shows HELLO when turn on it, After 8 seconds it will show C-21.0;
3. After you turn on the machine, If nothing shows in LCD, please replace the battery or try to connect to the DC power supply;
4. You can press the MENU button to select oxygen concentration , flow or pressure detection;
5. After you press the LED button, the backlight will light up;

2.3 Detect content

DISPLAY	MEASURES	UNIT
F	Oxygen flow	lpm
C	Oxygen concentration	%
P	Pressure	Kpa

2.4 Flow/ concentration measurement

Connect the outlet of the oxygen concentrator to the Flow/Oxygen port.

After switching on, the display shows the current oxygen concentration/ Flow numerically.

Please note that for most oxygen concentrators it is only 10 minutes after switching on the device that a precise concentration measurement can be carried out.

Oxygen concentrator and the RP-03, no humidifier may be connected.

2.5 Pressure measurement

For pressure measurement, the pressure line must be connected to the pressure port on the RP-03. The pressure can be displayed in Kpa.

2.6 Battery Charging

When the battery icon is flashing, it indicates that it is charging.

3. Technical indicators

Flow	
Range:	0-10L/min ☐ // 0-20L/min ☐
Resolution:	0.1LPM
Accuracy:	±0.2LPM
Concentration:	
Range:	21%-96% O2
Input:	Gas of PSA oxygen generator
Resolution:	0.1%
Accuracy:	±1.5%
Pressure:	
Range:	0-344Kpa
Accuracy:	±2Kpa
Temperature:	5-55℃
Display:	LCD
Power supply	12V 1A
Battery:	3000mA
Quality Assurance:	2years
Specifications:	Width: 9.5cm Length Including Inlet Fittings: 19.5cm Length: 17.6 cm Thickness: 3.5cm Weight: 300g

4. NOTE

4.1 The RP-03 must not be used to monitor life support systems. This product is only used for testing the output gas of the PSA oxygen generator.

4.2 The oxygen concentration measurement may only be performed in an oxygen-nitrogen gas mixture (e.g., oxygen concentrator).

4.3 Before detecting, please take off the humidifier bottle.

4.4 Battery can be charged