Accessories

Hand Carry Case   Moisture Filter Kit   Spare Filter   Temperature Sensor   Data Management Software

Booking Guide

Cat. No.	Measurement range
T100-01	0-20% CO_2
T100-02	0-20% CO_2 + 0-100% O_2

Company :   RADOBIO SCIENTIFIC CO.,LTD

Web :   www.radobiolab.com

Tel :   +86 21 58120810

Emaill :   info@radobiolab.com

Address :   Room 906, Building A8, No. 2555 Xiupu Road, Shanghai China

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ACCURATE INCUBATOR CO_2 CONCENTRATION VERIFICATION TOOL

T100

INCUBATOR CO_2 ANALYZER

T100 Incubator CO_2 Analyzer is specifically designed to monitor the concentration of CO_2 gas in CO_2 incubators. T100 incorporates the latest technology and standard requirements to provide cell culture users with a great experience of ease of use, fast detection and accurate readings, making it a must-have experimental test gauge for cell biology labs.

Product Features

Function

CO₂: 0~20%

Optional functions:
- O₂: 0~100%
- Up to two temperature sensors 0~50°C
- Data storage and download
- Humidity sensor 0~100%

Features

Improved accuracy of CO₂ readings

Designed for fast measurements in CO₂ incubators

Time saving and accurate temperature sensor (optional)

Dedicated software support for data storage and download (optional)

Large, easy-to-read LCD display and easy-to-touch buttons

Good pre-treatment of dehumidification and water filtration

Technical Parameters

Power supply		Parameter Measurement	
Battery type	Rechargeable lithium battery	Measuring principle	CO₂ by customized dual wavelength non-spectral infrared principle
Standby time	12 hours (8 hours with pump)		
Battery lifespan	Charge and discharge 600 times		O₂ by built-in electrochemical detection unit
Battery charger	5V DC external power supply	CO₂ unit lifespan	5+ years (in air)
Charging time	4 hours	O₂ unit lifespan	3+ years (in air)
Optional accessories		Measurement range	CO₂: 0~20%
Temperature measurement (optional)	0~50°C (up to 2 optional temperature sensors)		O₂: 0~100%
Temperature Accuracy	±0.2°C (32~44°C), other ±0.5°C	Measurement accuracy	CO₂ measurement accuracy: ±1%FS (range)
Humidity measurement (optional)	0~100%RH		O₂ measurement accuracy: ±1%FS (range)
Temperature accuracy	±1.5%RH	Reaction time	CO₂≤20 seconds; O₂≤60 seconds
Alarm	Sound and light alarm function for over concentration	**Others**	
		Weight	495g
Communication	USB interface, optional data management software	Dimension	165×100×155mm
		Case Material	ABS
Data storage	1000 records of readings (local storage)	Display	LCD, 128×64 pixels
Download function	+270 event records (optional data software)	Sample gas filtration	Embedded drying tube at the back to remove moisture, replaceable PTFE filter
Environmental conditions			
Operating temperature	0~50°C		
Relative Humidity	0~95%RH	**Expandable Applications**	
Atmospheric pressure	Calibration pressure ±500mbar	Laboratory CO₂ monitoring, Scientific research, In vitro fertilization, Medical	
Protection class	IP40		
Conditions at factory calibration	20°C, 1000mBar		

Operation Guidance

A: Main Read Screen
B: Soft-Keys
C: On/Off Key
D: Pump Key
E: Key 4 – Scroll Left
F: Key 8 – Scroll Down
G: Menu Key
H: Enter Key
I: Key 2 – Scroll Up
J: Key 6 – Scroll Right
K: Moisture Removal Tube
L: Serial Number
M: Instrument Stand

1 Press the on/off button to turn on

2 Charge the analyaer when the battery is low

3 Press menu key to set time and date

menu → 2 → 1

clock → 00:00:00

calendar → 00/00/00

4 CO₂ zero calibration (please refer to the operation manual)

menu → 3 → 2 → 1 → 5. ✔ / ✗

menu → 3 → 2 → 1 → 5. ✔ / ✗

menu → 3 → 2 → 1 → 5. ✔ / ✗

The best way is to use N2 to caibrate the zero point Or caliborate the zero point with air after connecting the sodafilter cartridge or in an air-ventlated aret

5 Connect the filter and sampling tube at the air inlet

6 Press the air pump button to draw sample gas

7 Keep pumping and observe the result

10% / 0% CO₂ T⁹⁰= ≤ 20s ✔

21% / 0% O₂ T⁹⁰= ≤ 60s ✔

8 Press the air pump button to pump air to cleanthe chamber

CO₂ 0.0% ✔
O₂ 20.9% ✔

9 Take the next measurement

6, 7, 8

10 Turn off the analyzer