ACCURATE INCUBATOR
VERIFICATION TOOL

G100

CO$_2$ analyser specifically designed to monitor CO$_2$ for the verification of incubators in research and pharmaceutical markets. This unit has been developed to incorporate the latest technology and specification requirements, that provide the user with a fast, simple to use and accurate piece of laboratory kit.

Benefits

- Accurate CO$_2$ readings
- Quick verification of CO$_2$ incubator levels
- Time saving with dual temperature probes
- Large data storage and user friendly software and download
- Easy to read large well lit display
- Built in gas moisture removal

Features

- CO$_2$ 0 - 20%
- Options for:
  - O$_2$ 0-100%
  - Dual temperature probes 0 to 50°C
  - Data storage and download
  - Humidity Sensor 0-100%

Applications

- IVF
- Research
- Laboratories
- Medical

G100

POWER SUPPLY

Battery type	Li Ion
Battery life	12 hours (10 hours with pump)
Battery lifetime	600 cycles
Battery charger	5v DC external power supply and internal charging circuit
Charge time	4 hours
Alternative power	5Vdc power supply

GAS RANGES

Gases Measured	CO_2	By custom dual wavelength infra-red with reference channel
	O_2 (Optional)	By internal electrochemical cell
Oxygen cell lifetime	Approximately 3 years in air	
Range	CO_2	0-20%
	O_2	0-100%
Measurement Accuracy*	CO_2	± 1% of range after calibration
	O_2	± 1% of range after calibration
Response time T^{90}	CO_2	≤ 20 seconds
	O_2	≤ 60 seconds
* plus accuracy of calibration gas used		

FACILITIES

Temperature (optional)	x 2 using optional probes 0°C to +50°C
Temperature accuracy, typical	± 0.1°C from 32 to 44°C, ± 0.2°C over the rest of the range
Barometric pressure	800 - 1200 mbar
RH measurement (optional)	RH Probe 0 - 100% RH non condensing
RH accuracy	± 1.5% RH across the range
Visual and audible alarm	User selectable CO_2 and O_2 alarm levels
Communications	USB type B mini-connector, HID device class
Data storage	1000 reading sets + 270 events

G100 cont'd

PUMP

Flow	100cc/ min typically

ENVIRONMENTAL CONDITIONS

Operating temperature	0°C to 50°C
Relative humidity	0 - 95% non condensing (RH Probe 0 - 100% non condensing)
Barometric pressure	± 500mbar from calibration pressure
IP rating	IP40

PHYSICAL

Weight	495 grams
Size	L 165mm, W 100mm, D 55mm
Case Material	ABS/ Polypropylene with Silicone Rubber Inserts
Keys	17 Resin capped Silicone Rubber keys
Display	Liquid crystal display, 128 x 64 pixel With RGB LED back-light
Gas sample filters	Built-in gas dryer tube to remove moisture User replaceable PTFE water trap filter

Note: Due to Geotech's continous programme of improvement, this specification is subject to change without prior notice.

CERTIFICATION

EN 50270 :2006	Electromagnetic compatibility - Electrical apparatus for the detection and measurement of combustible gases, toxic gases or oxygen
EN61010 -1:2010	Safety requirements for electrical equipment for measurement, control, and laboratory use. Part 1: General requirements