Labdisc BioChem Data Logger Specifications

Parameter	Labdisc BioChem
Supported Platforms	Standalone, PC, Mac, iPad, Linux, Android, Chromebook
Built-in Accessible Sensors	15 sensors: Air Pressure, Ambient Temperature, Barometric Pressure, Colorimeter, Conductivity, Dissolved Oxygen (electrode sold separately), External Temperature, GPS, Heart Rate, Light, pH, Relative Humidity, Thermocouple, Turbidity, Universal Input
Max. Sampling Speed	100/s
Sampling Resolution	12-bit
Internal Data Storage	128,000 samples
Internal Rechargeable Battery	LiPO 3.6V
Battery Life	> 150 Hours
Display	Graphical LCD 64 x 128 pixels
Keypad	Yes
Communication	USB 2.0
Wireless Communication	Bluetooth V2.0 on all sensors
Remote Data Collection	Yes
Automatic Sensor Testing & Calibration	Yes
Size	ϕ=132, H=45 mm
Weight	300 gr.
Temperature Range	-10 to 50 °C
Standard Compliance	CE, FCC

Globisens

Labdisc BioChem Built-in Sensor Specifications

Sensor Type	Max. Range	Accuracy
Air Pressure	0 to 300 kPa	±2.5 kPa
Ambient Temperature	-10 to 50 °C	±1 °C
Barometer	300 to 1100 mB	±2.5 mB
Colorimeter	10 to 90% transmittance (3 colors) λ R=620 nm λ G=550 nm λ B=470 nm	±5 %
Conductivity	0 to 20 ms	±2 %
Dissolved Oxygen	0 to 14mg/l	±8 %
External Temperature	-25 to 125 °C	±2 °C
GPS	N/A	±3m
Heart Rate	0 - 200 bpm	±1 digit
Light	0 – 55,000 lx	±15 %
pH	0 to 14 pH	±2 %
Relative Humidity	0 to 100 %RH	±4%, 10% to 90% RH
Thermocouple	-200 to 1200 °C	±2 %
Turbidity	0 to 1000 NTU	±10 %
Universal Input	0 to 5 V	±2 %

Analysis Software Specifications

Parameter	Description
Data Retrieval	Online up to 100 samples per second, or download Labdisc stored data
Data Display	Line graphs, bar graphs, tables, meters, Google Maps
Communication	USB 2.0, Bluetooth 2.0
Data Logging Configuration	Sensor selection, sampling rate, sampling points
Graph Manipulation	Placing and moving up to 2 markers on the graphs, zoom in/out, graph cropping, graph color change, sensor legend (allowing graph show/hide and the selection of lines/icons for the graph samples)
Graph Annotation	Text and image annotations on the graph
Mathematical Functions	Derivative, linear regression, quadratic regression, FFT
Statistics	Minimum, maximum, average, standard deviation for a selected graph
Simulation	Gas and liquid molecule behavior, with parameter control
Data Manipulation	Save/open experiment data, direct export to EXCEL, display hardcopy printout
Workbook	Full suite of built-in curriculum activities
Stored Experiments	Full suite of stored experiment data
Configuration	Sensor calibration, change of sensor units
Firmware Update	Ability to update the Labdisc firmware through a USB connection
OS	PC, Mac, Linux, iPad, Android, Chromebook