Labdisc Physio Data Logger Specifications

Parameter	Labdisc Physio
Supported Platforms	Standalone, PC, Mac, iPad, Linux, Android, Chromebook
Built-in Sensors	11 sensors: Accelerometer, Air Pressure, Ambient Temperature, Current, Distance (Motion), External Temperature, Light, Low Voltage, Microphone, 2 x Universal Input, Voltage
Stopwatch	0.1s to 99:59.9 minutes
Max. Sampling Speed	100,000/s
Sampling Resolution	12-bit
Internal Data Storage	1,000,000 samples
Internal Rechargeable Battery	LiPO 3.6V
Battery Life	> 150 hours
Display	Graphical LCD
Keypad	Yes
Communication	USB 2.0
Wireless Communication	Bluetooth V2.0+EDR
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

Labdisc Physio Built-in Sensor Specifications

Sensor Type	Max. Range	Accuracy
Accelerometer (3 Axis)	-8 to +8g	±3 %
Air Pressure	10 to 300 kPa	±2.5 kPa
Ambient Temperature	-10 to 50 °C	±1 °C
Current	-1 to 1 A	±2 %
Distance (Motion)	0.4 to 10 m	±2 %
Light	0 to 55,000 lx	±15 %
Low Voltage	- 500 to 500 mV	±2 %
Microphone	0 to 5 V	N/A
Ext. Temperature	-25 to 125 °C	±2 °C
Universal Input (2 ports)	0 to 5 V	±2 %
Voltage	- 30 to 30 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 two 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
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