

# Battery Voltage Recorder

- Lightweight - only 0,6 kg (1,3 lbs)
- Cell voltage measurement ranges:  $\pm 2,35$  V;  $\pm 7$  V;  $\pm 30$  V
- Temperature measurement
- Density of electrolyte measurement (communicating with external hydrometer)
- RFID cell recognition



## Handheld Battery Voltage Tester

### Description

The Battery Voltage Recorder (BVR) is intended for measuring battery voltages and temperature while battery is either connected or disconnected from the network. It can be used during a battery charging/discharging process as well. When used in combination with BLU200 it serves as an efficient supplement to the battery capacity testing. The BVR can also provide data on the density of the electrolyte by communicating with an external hydrometer over an infrared (IR) link. An additional feature is the compatibility with the cell tags enabling cell recognition over Radio Frequency Identification (RFID)

This device is simple and easy to use with the possibility to systematically memorize the results of each measurement. All measurements are time and date stamped. It also has the possibility of fast and easy data transfer and storage over USB cable. Future analysis of data transferred to a PC is possible by using DV-Win set of software applications.

This device is equipped with keyboard, graphical 3,1" touch-screen display and voltage measurement completion indicated with the sound signal. All these features add up to its simple use.

### DV-Win Software

Using DV-Win the results can be presented as tables and graphical curves and bars. They can be arranged and printed for a report in a selectable format as an Excel spreadsheet, PDF, Word or ASCII format. Additionally, importing other types of data formats (jpeg, png, doc) into standardized DV-Win report is provided, as well as exporting the numerical and graphical results from DV-Win into customizable reports. Also, the system application provides an alarm notification when detecting cells with voltage level lower than the threshold. DV-Win enables a user to retrieve historic data on every individual cell.

## Accessories

### Included

- DV-Win PC software
- Transport bag
- Carrying belts
- Mini USB cable

### Recommended

- Sense cables
- PT100 temperature indicator



Voltage sense cables



PT 100 temperature indicator

## Technical Data

### 1 - Mains Power Supply

#### Battery

- Type 2 Cell – 2600 mAh Li-Ion
- Voltage 3,7 V
- Charge time 6 hours

#### AC Adapter

- Input voltage 90 – 264 V AC, 50/60 Hz
- Output voltage 12 V DC
- Output current 3 A

### 2 - Output data

- |                    | Measuring range:                                  | Resolution: |
|--------------------|---------------------------------------------------|-------------|
| - Cell voltage     | ±2,35 V DC                                        | 1 mV        |
|                    | ±7 V DC                                           | 1 mV        |
|                    | ±30 V DC                                          | 1 mV        |
| - Temperature      | -50 °C - +260 °C / -58 °F - +500 °F               |             |
| - Typical accuracy | ±2,35 V; ±7 V; ±30 V DC: ± (0,05% rdg + 0,05% FS) |             |

### 3 - Display

- Type TFT LCD 3.1 in
- Viewing Area 43,2 mm x 57,6 mm / 1,8 in x 2,3 in
- Resolution 320 x 240 pixels

### 4 - Communication

- Infrared IRDA for hydrometer
- USB Device to PC connection
- RFID Tags for cell recognition

## 5 - Memory

- Internal 2 GB SD Card

## 6 - Real time clock

- Precision  $\pm 5$  seconds per month
- Calendar 100 year with leap year detection
- Time retention 10+ years (battery removed)

## 7 - Environment conditions

- Temperature -10 °C - +45 °C / 14 °F - +113 °F
- Maximum relative humidity 95 % for temperatures up to 31 °C, decreasing linearly to 40 % relative humidity at 55 °C
- Pollution degree 2
- Insulation category II

## 8 - Dimensions and Weight

- Dimensions 253 mm x 116/89/96 mm x 46/36 mm  
10 in x 4,6/3,5/3,8 in x 1,8/1,4 in  
(L x W x D)
- Weight 0,6 kg / 1,3 lbs

- 9 - Warranty** three years

## 10 - Safety Standards

- European standards EN 61010-1  
LVD 2006/95/EC
- International standards IEC 61010-1  
UL 61010-1  
CAN/CSA-C22.2 No. 61010-1, 2<sup>nd</sup> edition, including Amendment 1

## 11 - Electromagnetic Compatibility (EMC)

- CE conformity EMC standard 89/336/EEC  
EMC directive 2004/108/EC
- Emission EN 61326-1
- Interference Immunity EN 61326-1

*All specifications herein are valid at ambient temperature of + 25 °C and recommended accessories.  
Specifications are subject to change without notice.*