

Battery Voltage Recorder **BVR11**

- Lightweight - only 0,5 kg (1.1 lbs)
- Cell voltage measurement range: ± 30 V
- String voltage measurement range: ± 500 V
- Ambient temperature measurement
- Current measurement using current clamps
- Easy transfer of measured data to DV-B Win software



Description

Battery Voltage Recorder BVR11 is a handheld device intended specifically for measuring string voltage, single battery voltage and ambient temperature. In addition it can be used for current measurement by using current clamps. Common deployment of BVR11 is during acceptance and performance capacity tests of large battery banks, where it serves as an efficient supplement with DV Power BLU series of Battery Load Unit devices.

BVR11 can be used for measuring voltage and temperature parameters while battery is either in online or offline mode. BVR11 records all measured data in its internal memory, with an

ability of storing up to 1000 measurements. Measured data is displayed in the form of histograms on the 3.1 inch color touch screen. Due to its ability to cover a wide voltage measurement range of up to 500 V, large battery banks as well as single cells can be tested and supervised with this device.

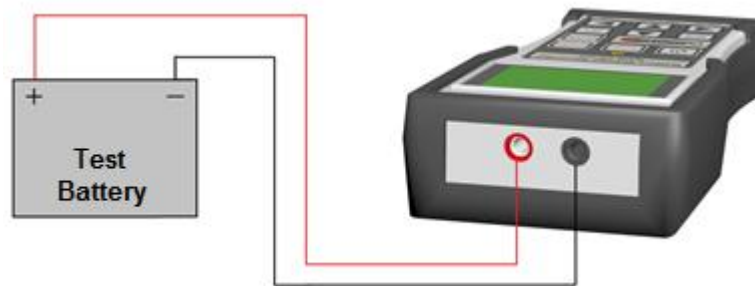
Download of collected data to an external computer is available via USB and Bluetooth communication. Detailed analysis and trending of battery banks and single batteries state of health is enabled by using DV – B Win software application set.

Application

The list of the instrument application includes:

- Efficient supplement to BLU series of Battery Load Units during extensive battery Discharge testing
- Single battery and string voltage measurements for large battery banks
- Ambient temperature measurement
- Current measurement using current clamps
- USB and Bluetooth communication with external computer
- String and battery voltage analysis provided with DV-B Win software application functions

Connecting BVR11 to a battery



DV-B Win Software

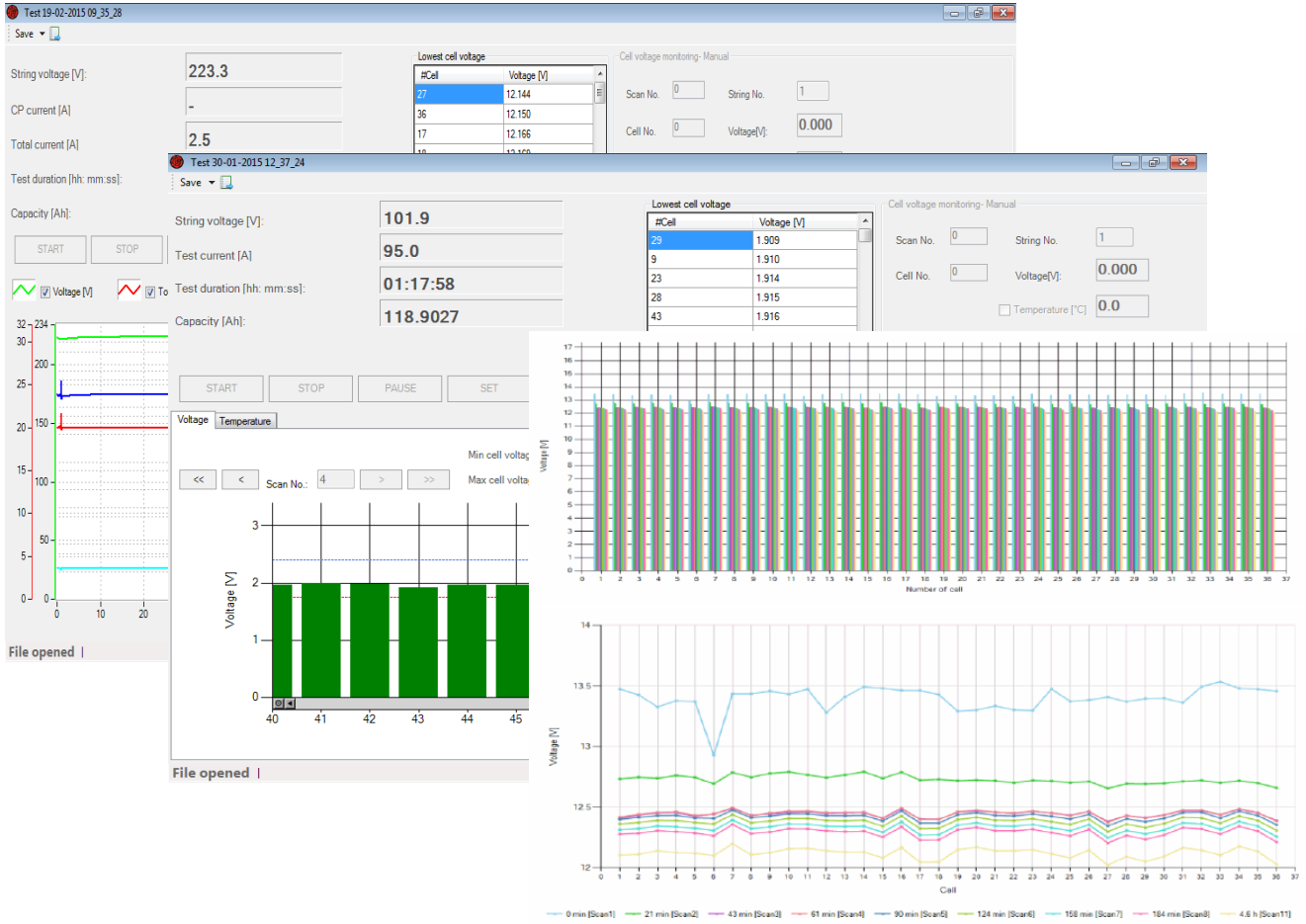
Using DV-B Win software package all results can be presented in several forms. Single battery voltages can be shown in Table and Scan Graph, as well as Line view.

In order to perform detailed comparisons and analysis of measured data, user defined limits for battery and string voltage as well as ambient temperature are displayed in the scan graph view along with measured results.

A test report of collected data can be generated and user customized for a comprehensive battery state of health assessment.

Numerical and graphical results may be exported from DV-B Win in selectable formats such as Excel spreadsheet, PDF, Word or Rich Text Format. Additionally, importing other types of data formats (.jpeg, .png, .doc) into standardized DV-B Win report is provided as well.

DV-B Win software provides an alarm notification when detecting cells with voltage levels lower or higher than defined thresholds.



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DV-B Win application functions – String view, Battery Scan view and Line voltage chart

Technical Data

Mains Power Supply

Battery

- Type 1 Cell – 2600 mAh Li-Ion
- Voltage 3,7 V
- Charge time 6 hours

AC Adapter

- Input voltage 90 to 264 V AC, 50/60 Hz
- Output voltage 12 V DC
- Output current 0,5 A

Output data

- | | Measuring range | Resolution |
|------------------------|--|-----------------|
| • Cell voltage | ± 30 V DC
±500 V DC | 10 mV
100 mV |
| • Ambient temperature: | -10 °C to +55 °C / 14 °F to +131 °F | |
| • Typical accuracy: | ± 30 V DC; ± 500 V DC:
± (0,05% rdg + 0,05% FS) | |

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

Communication

- USB and Bluetooth: Device to PC connection

Memory

- Internal: 2 GB Micro SD Card

Real time clock

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

Environment conditions

- Temperature:
-10 °C to +45 °C / 14 °F to +113 °F
- Maximum relative humidity 95 % for temperatures up to 31 °C, decreasing linearly to 40 % relative humidity at 55 °C

Dimensions and Weight

- Dimensions (L x W x D):
223 mm x 98 mm x 46 mm
8.77 in x 3.85 in x 1.81 in
- Weight: 0,5 kg / 1.1 lbs

Warranty

- Three years

Low Voltage Directive:

- Directive 2014/35/EU (CE conform).
- Applicable standards, for a class I instrument, pollution degree 2,
- Installation category II: IEC EN 61010-1

Electromagnetic Compatibility:

- Directive 2014/30/EU (CE conform).
- Applicable standard: EN 61326-1

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



Voltage sense cables

Current clamp 30/300 A with internal battery supply and extension 5m

Order Info:

Instrument with included accessories	Article No
Battery Voltage Recorder BVR11	BVR11X-NN-00
DV-B Win software including mini USB cable	
Transport bag and carrying belts	
Power supply adapter	

Recommended	Article No
Sense cables	S2-0122-BPBP
Current clamp 30/300 A with internal battery supply and extension 5 m	CACL-0300-08

Optional	Article No
Bluetooth communication module	BLUETOOTH-00