

# PRODUCT SPECIFICATIONS

Revov LiFe 51.2 V LiFePO4 Battery Energy Storage System

y Energy

BATES INTERIOR SOLUTIONS (PTY) LTD
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Suppliers and installers of Raised Access Flooring & Energy Solutions

### Models: B100 100Ah (5.12kWh)

The REVOV LiFe B100 is designed to be a plug-n-play part of an Inverter Controlled energy storage system which reduces installation time and cost. Anti-theft technology makes the battery an undesirable target for thieves. The REVOV B100 is a Lithium Iron Phosphate based system expertly assembled to meet the highest standards of SAFETY, RELIABILITY and LONGEVITY. It is the perfect choice to provide backup, primary and secondary power where daily cycling of the system is required or desired. It is common to install just one battery to deal with blackouts but grow the system later. More batteries can be added easily for clients who are reducing their grid power usage in a phased approach.

LiFePo batteries are designed to last over 6000 cycles, making the REVOV LiFe B100 ideal for residential and commercial applications. This premium product delivers the highest quality, extreme temperature resilience, high energy density, low weight in a small form factor. REVOV LiFe batteries' weight and size allows for wall and 19" rack mounting.

### APPLICATION

- Residential Backup and Solar
  - Business Backup •
- Solar, Wind or Hybrid Storage
  - Reduce Grid power usage •
- Ideal first battery in a growing system
  - Computer room UPS power
    - Telecoms base station •











## INTEGRATED BATTERY MANAGEMENT SYSTEM

#### **BMS Monitors and Manages:**

- Charge and Discharge Current
- Over-Charge protection and recovery
- Over-Discharge protection and recovery
- Cell voltage Detection
- Discharge Over-Current Protection
- Short Circuit Protection
- Cell Balancing
- Temperature protection and recovery

#### **BMS Indicator lights:**

- Green Light Normal Operation
- Red Light ON Fault Detected
- Green Light Flashing Charging
- Green and Red Light Flash Over-Discharge warning
- Fault detection On fault detection the BMS stops charge or/and discharge,
- Recovery when conditions return to normal BMS releases the protection

  made.

### NOMINAL SPECIFICATIONS

Nominal Voltage	51.2V
Nominal Capacity	(1C) 100Ah
Energy (1C)	5.12kWh
Max Continuous Discharge Current	100A

### FFATTRES

- Anti-Theft Technology •
- Lithium Iron Phosphate (LiFePO4) •
- Add batteries by parallel connection
  - Lifetime exceeds 10 years at 25 C
    - Integrated BMS 48V •
    - No active cooling required •
- Wall mount and 19"Rack compatible •

## ADVANTAGES

- Theft Protection
- LCD Configuration Display •
- Unmatched Cost per Cycle
- Best Lithium chemistry safety record
  - Inverter Managed system
  - Rapid Installation (Requires no configuration)
- Pre-configured with optimal Parameters
- 16 Cell design allows parallel connection

  with any other REVOV battery

### **KEY FEATURES OF REVOY LIFE B100:**

#### **Anti-Theft Protection:**

 Battery is totally disabled if removed and cannot be used by thieves

#### LCD Display Screen:

- Menu to view upper and lower bounds of BMS settings
- Display Battery statistics
- Navigate options with menu buttons

#### Depth of Discharge:

- When used properly every day the B100 can be safely discharged to a 100% of its rated 100Ah capacity. Battery life will be shortened if it is discharged beyond 100Ah.
- Over 80% of original 100Ah capacity on completion of 3500 full cycles

#### Plug-n-Play in an Inverter Controlled ESS:

- In this context Plug-n-Play, and Inverter Controlled ESS is an installation in which the Inverter is configured as the first line of safety with slightly stricter upper and lower bounds on controls (like over and under voltage and temperature thresholds) than those that are pre-configured in the BMS. The BMS in turn, is pre-configured with slightly stricter settings than the physical thresholds of the battery cells.
- In a correctly configured ESS, the inverter is the only device that requires configuration and is the first line of Control. If the inverter control is bypassed by some event, the BMS will react to protect the battery if required. The BMS is dedicated to Battery management and protection. Installers can complete an installation by connecting the battery into a correctly configured inverter. The BMS will auto-start and operate and requires no configuration.

#### FOR MORE INFORMATION PLEASE CONTACT



Suppliers and installers of Raised Access Flooring & Energy Solutions

Tel: 011 447 8370 Cell: +27 66 327 9870

www.batesinteriorsolutions.co.za

### PRODUCT DIMENSIONS AND WEIGHT

Length/Depth (mm)	420 +- 1.5
Width (mm)	482 +- 2
Height (mm)	177 +- 1.5
Weight (kg)	42

## **ELECTRICAL SPECIFICATIONS**

Standard / Max Charge current	20 A / (Max) 100A
Recommended Recharge Time	2 hours
Max recommended discharge rate	0.6 C
Max recommended daily continuous discharge current	60A
Boost / Absorption Charge	55.5V
Float Charge	54.5V
Suggested Inverter Cutoff Voltage	48-49V
BMS Disconnect / Cutoff Voltage	43.2V

### OPERATING CONDITIONS

Design Cycle Life	6,000
Operating Temperature	
Charge:	Zero / 45°C
Discharge:	-20°C / 60°C
Intrusion Protection Class	IP30
Warranty	10 years or 3500 cycles at 1 cycle per day

