

# RACPOWER® BATTERIES FOR BACKUP POWER



**THUTHUKANI**  
ELECTRICAL CONTROL & INSTRUMENTATION

Over-charge, over-discharge & short-circuit protection.

## GENERAL SPECIFICATIONS

Code	BN52V-100-5.2K BP
Battery Chemistry	Lithium Iron Phosphate (LiFePO4)
Nominal Voltage	51.2V
Ah Rating	100Ah @C3, 25°C
Installed Capacity @Vnom	5 120Wh
Internal Resistance	≤ 50mΩ @1kHz AC

## CURRENT

Code	BN52V-100-5.2K BP
Charge Current (max.)	50A continuous   ≤ 50A recommended
Discharge Current (max.)	100A for 30 mins.   ≤ 70A recommended
Self-discharge Rate	Residual capacity: ≤ 3% /month   ≤ 15% /year Recover capacity: ≤ 1.5% /month   ≤ 8% /year

## VOLTAGE

Code	BN52V-100-5.2K BP
Operating Voltage Range	40.0V ~ 57.6V
Bulk Voltage (max.)	57.6V ± 0.3V
Float Voltage (recommended)	54.4V ~ 55.2 V
Low-Voltage (min.)	40.0V

## PHYSICAL ATTRIBUTES

Code	BN52V-100-5.2K BP
Dimensions – Main enclosure	442mm x 435mm x 135mm (L x W x H)
Dimensions – Front plate	465mm x 133mm (L x H)
Net Weight	43.0kg (unboxed, no accessories)
Terminal connection	RS485 Communication Included

## ENVIRONMENTAL REQUIREMENTS

Code	BN52V-100-5.2K BP
Operating Temperature Range	@Charge: 0°C ~ +50°C @Discharge: -10°C ~ +50°C
Recommended Operating Environment	Temp. range: +15 ~ +35°C   Humidity: 5 ~ 75%RH
Storage Environment (stored ≤ 1 month)	Temp. range: -20 ~ +60°C   Humidity: 5 ~ 75%RH
Storage Environment (stored ≥ 3 months)	Temp. range: +10 ~ +45°C   Humidity: 5 ~ 75%RH

**BLUE NOVA**  
energy

## FEATURES

- Ultra-reliable Lithium Iron Phosphate Technology.
- **High Performance:**
  - Power output = 5.2kW (continuous)
  - Fully rechargeable in 2 hours
- **Robust & Durable:**
  - Can be discharged to 100% DoD.
  - Minimum cycle life > 6000 cycles.
- **Safe & Secure:**
  - Over-charge, over-discharge & short-circuit protection.
  - Non-combustible & 100% Recyclable.
  - CryptoLock® functionality optionally included.
- 3 year product warranty.

