



BIG BEARD BATTERY™

BBB 12V300 THE ORIGINAL



12 Volt Battery
Lithium Iron Phosphate
WITH ACTIVE BALANCE

⚠ CAUTION

Do not short the battery terminals. Do not crush, set fire to, puncture, or otherwise destroy the battery.

Max discharge Rate: 300 amps
Max Charge Rate: 300 amps
Absorption Voltage: 14.4 volts
Float Voltage: 13.6 volts
Absorption Time: 2.5 hours

Internal Heat Protection
High/Low Volt Protection
Cold Charging Protections
Short Circuit Protection
Active Balancing and Passive Balancing

GENERAL SPECIFICATIONS:

- Battery Type: LiFePO4 (Lithium Iron Phosphate)
- Cell type: Prismatic
- Nominal Voltage: 12.8V
- Nominal Capacity: 305Ah
- Energy: 3,660Wh (3.66 kWh)
- Cycle Life: ≥4000 cycles at 80% Depth of Discharge (DOD)
- Design Life: 11 years

ELECTRICAL CHARACTERISTICS:

- Nominal Voltage: 12.8V
- Operating Voltage Range: 11V – 14.6V
- Max Continuous Charge Current: 300A
- Recommended Charge Current: 150A
- Max Continuous Discharge Current: 300A
- Recommended Discharge Current: 250A
- Peak Discharge Current: 450A (up to 20 seconds)
- Charge Cut-off Voltage: 14.6V ± 0.2V
- Discharge Cut-off Voltage: 11.2V
- C-rate: 0.5C for recommended discharge, 1C for max continuous discharge

PHYSICAL SPECIFICATIONS:

- Dimensions (L x W x H): 15.25" L x 7.5" W x 12.25" H
- Weight: 63lbs
- Terminal Type: bolt-down M8 bolt
- Case Material: metal

PERFORMANCE CHARACTERISTICS:

- Self-Discharge Rate: $\leq 3\%$ per month
- Efficiency: $\geq 96\%$ round-trip
- Discharge Temperature: 34°F to 120°F (internal self-heating will turn on at 34°F)
- Charge Temperature: 32°F to 113°F
- Storage Temperature: (-4°F to 113°F)

SAFETY AND PROTECTIONS:

- **Battery Management System (BMS):**
- Overcharge Protection
- Over-discharge Protection
- Overcurrent Protection
- Short Circuit Protection
- Internal heating turn on temp 34° and turn off temp 40°
- Cell Balancing- Active at 3.4v on each cell
- On/off switch for storage mode
- Cold temperature and hot temperature protections
- ESS Victron compatible
- Bluetooth monitoring compatible

APPLICATIONS:

- Solar Energy Storage
- RV/Off-grid Use
- Off-grid Power Systems
- Backup Power

WARRANTY:

- 11-year limited warranty
- 11-year expected lifespan

