



BIG BEARD BATTERY™ BBB48V300 “THE GOLIATH”



GENERAL SPECIFICATIONS:

- Battery Type: LiFePO4 (Lithium Iron Phosphate)
- Cell type: Prismatic
- Nominal Voltage: 51.2V
- Nominal Capacity: 305Ah
- Energy: 14,460Wh (14.64 kWh)
- Cycle Life: ≥4000 cycles at 80% Depth of Discharge (DOD)
- Design Life: 11 years

ELECTRICAL CHARACTERISTICS:

- Nominal Voltage: 51.2V
- Operating Voltage Range: 48V - 56V
- Max Continuous Discharge Current: 200A
- Peak Discharge Current: 350A (up to 10 seconds)
- Max Continuous Charge Current: 200A
- Charge Cut-off Voltage: 57V ± 0.2V
- Discharge Cut-off Voltage: 44.8V
- C-rate: 0.5C for recommended discharge, 1C for max continuous discharge

PHYSICAL SPECIFICATIONS:

- Dimensions (L x W x H): 30.5" L x 16.25" W x 10" H (without casters)
33.5" L x 16.25" W x 10" H (with casters)
- Weight: 253lbs (without casters) 259lbs (with casters)
- Terminal type: threaded terminal post
- Case Material : metal

PERFORMANCE CHARACTERISTICS:

- Self-Discharge Rate: $\leq 3\%$ per month
- Efficiency: $\geq 96\%$ round-trip
- Temperature Range:
- 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
- Thermal 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

APPLICATIONS:

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

WARRANTY:

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

