



48V 105AH LITHIUM BATTERY

General Information

Model Number:	BL-48V105A-S
Chemistry:	Lithium Iron Phosphate (LiFePO ₄)
Nominal Voltage:	51.2V
Nominal Capacity:	105Ah
Energy:	5.38kWh
Cycle Life:	≥3500 cycles @100% DOD ≥6000 cycles @50% DOD

Electrical Specifications

Nominal Voltage:	51.2V (3.2V per cell × 16)
Operating Voltage Range:	48V – 51.2V
Nominal Capacity:	105Ah
Standard Charge Current:	20A
Max Continuous Charge Current:	100A
Max Continuous Discharge Current:	250A
Peak Discharge Current:	300A (30s) 600A (3s)
Charge Cut-off Voltage:	58.4V
Discharge Cut-off Voltage:	40V
Internal Resistance:	≤30mΩ
Self-Discharge Rate:	≤3%/Month

Mechanical Specifications

Dimensions (L×W×H):	22.01 in × 9.76 in × 10.89 in
Weight:	≈98.10 lbs
Case Material:	• Proprietary, Corrosion Resistant Steel • IP65 Waterproofing

Environmental Conditions

Charge Temperature Range:	32° ~ 131°F
Discharge Temperature Range:	-4° ~ 140°F
Storage Temperature Range:	50° ~ 113°F
Relative Humidity:	≤75% RH



Battery Management System (BMS)

Overcharge Protection:	Yes
Over-Discharge Protection:	Yes
Over-Current Protection:	Yes
Short Circuit Protection:	Yes
Cell Balancing:	Active/Passive balance

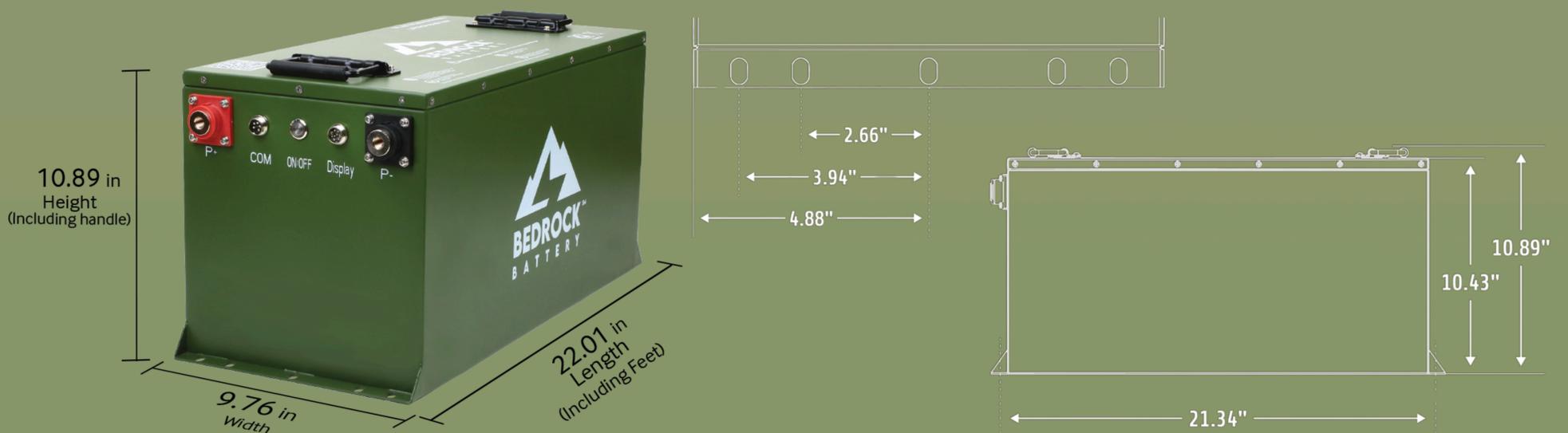
Safety & Certifications

Certifications:	<ul style="list-style-type: none"> • Shipping Safety • International/EU Compliance • Battery Safety • Material Safety Data • Performance & Industrial Safety • Chemical/Environmental Safety 	<ul style="list-style-type: none"> • UN38.3 + Sea & Air Transport Reports • CB & CE • UL1973 & UL2580 • MSDS • IEC626660 & IEC62619 • REACH & RoHS
Communication:	Bluetooth	
Warranty:	10 year Transferable Warranty	

Cycle Life Performance

Cycle Life	≥3500 cycles, 1C @ DOD 100%
	≥6000 cycles, 0.2C @ DOD 100%

Dimensional Specifications



Never use or keep the battery under the high temperature. Otherwise it will cause battery heat, get into fire or lose some function and reduce the life. The proposed temperature for long-term storage is 0-45°C.