

# PHI 1.4™ BATTERY

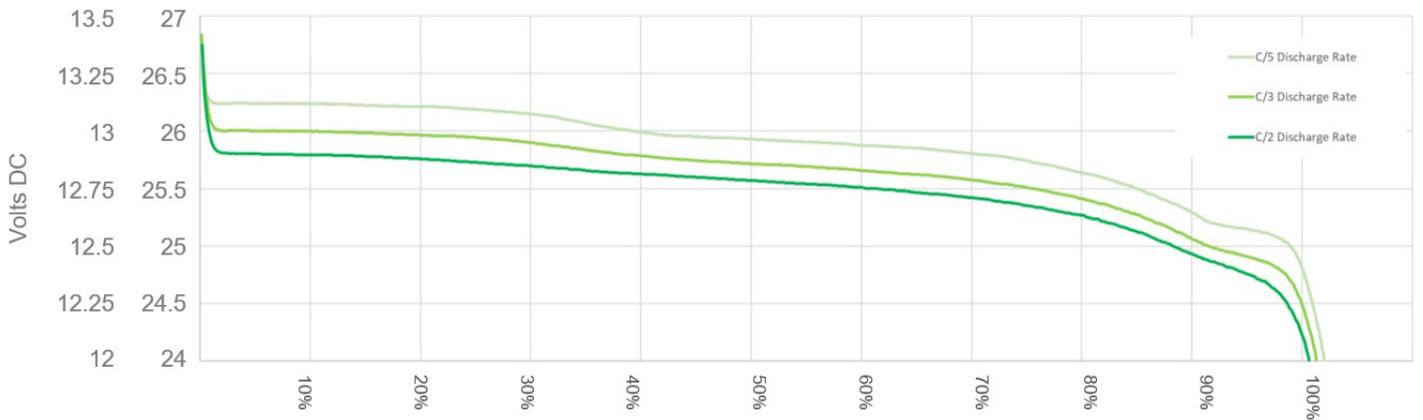


SimpliPhi Power's PHI 1.4™ Battery utilizes the safest Lithium-Ion chemistry available, Lithium Ferro Phosphate (LFP). No cobalt or explosive hazards that put customers at risk. By eliminating cobalt, the risk of thermal runaway, fire propagation, operating temperature constraints, and toxic coolants are reduced. When combined with our integrated high-performance Battery Management System (BMS), accessible DC breaker On/Off switch and overcurrent protection (OCPD), the PHI 1.4 Battery delivers safe, highly efficient and cost-effective service over the life of both small recreational and residential installations, on or off-grid. Compatible with all industry-standard inverter charge controllers, the PHI 1.4 Battery supports balance-of-system equipment and optimizes any power generation source – solar, wind, grid, generator – with scalable, on-demand energy storage solutions for RVs, critical back-up and daily savings on electricity bills.

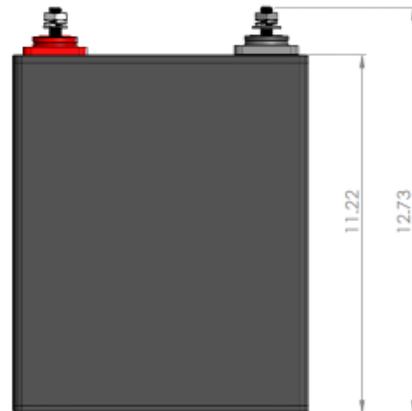
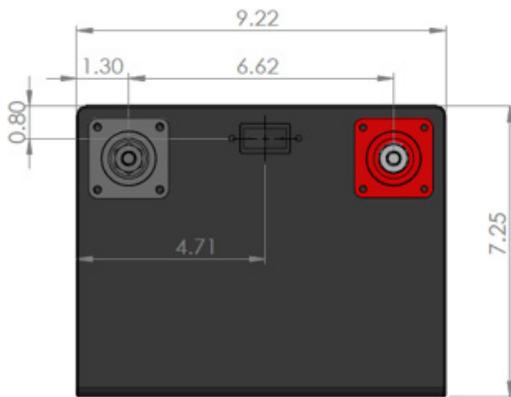
PHI 1.4™	12V	24V
DC Voltages - Nominal	12.8 VDC	25.6 VDC
Amp-Hours	115 Ah	57 Ah
Rated kWh Capacity	1.4 kWh DC @ 100% DOD 1.12 kWh DC @ 80% DOD	1.4 kWh DC @ 100% DOD 1.12 kWh DC @ 80% DOD
MAX Discharge Rate (10 minutes)	100 Amps DC (1.2 kW DC)	60 Amps DC (1.53 kW DC)
MAX Continuous Discharge Rate	57 Amps DC ( <b>0.69 kW DC</b> )	28.5 Amps DC ( <b>0.73 kW DC</b> )
MAX Continuous Charge Rate	57 Amps DC ( <b>0.69 kW DC</b> )	28.5 Amps DC ( <b>0.73 kW DC</b> )
DC Voltage Range <sup>1</sup>	12 VDC to 14 VDC	24 VDC to 28 VDC
Depth of Discharge <sup>1</sup>	up to 100%	
Operating Efficiency	98%	
Charging Temperature <sup>1</sup>	32° to 120° F (0° to 49° C)	
Operating Temperature <sup>1</sup>	-4° to 140° F (-20° to 60° C)	
Storage Temperature	6 months: 14° to 77° F (-10° to 25° C) 3 months: -4° to 113° F (-20° to 45° C)	
Self-Discharge Rate	< 1% per month	
Cycle Life	10,000+ cycles (@ 80% DOD)	
Memory Effect	None	
Warranty	10 years	
Weight	33 lbs. (15.1 kg)	
Dimensions (W x H x D)	11.25 x 9.25 x 7.25 in. (23.495 x 28.575 x 18.415 cm)	
Certifications	UL, CE, UN/DOT 38.3, RoHS - UL1642	

1. Max operating ranges. Refer to Installation Manual for recommended conditions.
- All specifications listed are typical/nominal and subject to change without notice.
  - UN 3480, Lithium-ion batteries, Class 9, Group II
  - Engineered and manufactured in California, USA

## Battery Voltage VS. Discharged Capacity



## PHI 1.4™ BATTERY



PHI 1.4™	12V	24V
Bulk & Absorb Charge	14 VDC	28 VDC
Absorb Time	1 HR	1 HR
Charge Controller Float Charge	13.5 VDC	27 VDC
Inverter Charging	2 STAGE NO FLOAT	
Equalization Charge	NONE	
Temperature Compensation	NONR	

PHI 1.4™	12V	24V
Battery Cables	14 VDC	28 VDC
See Installation Manual for detailed wiring instructions		

Refer to the Integration Guide section of SimpliPhi's [Product Documentation](#) web page for inverter and/or charge controller specific settings. Must be followed to maintain PHI Warranty.