

Troppo

LFP 4841



RedEarth's Troppo Battery uses the lithium-ion chemistry available, Lithium Ferro Phosphate (LFP). When combined with our latest Battery Management System (BMS), accessible 63A DC dual pole breaker On/Off switch and overcurrent protection (OCPD), the Troppo Battery delivers safe, highly efficient and cost-effective service over the life of both residential and commercial installation, on or off-grid.

Compatible with all industry-standard inverter charge controllers, the Troppo supports balance-of-system equipment and optimizes any power generation source – solar, wind, grid and generator – with scalable, on-demand energy storage solutions for critical back-up and daily savings on electricity bills.

- Maintenance Free
- 10-year Warranty
- High Efficiency >96%
- Flexible Capacity Design
- Flexible Installation Options
- BMS in Each Battery
- Compatible AC & DC Coupled Systems
- High Temperature Protection
- Low Temperature Protection
- Over Charge Protection
- Made in Australia
- National Support



SPECIFICATIONS

Electrical Characteristics			
Nominal Capacity	4.1kWh / 79.8Ah	Usable capacity with recommended voltage range	3.28kWh = 80% of nominal
Nominal DC Voltage	51.2V	Charge/Discharge Cycles of certified 3,800mAh cells at 1C rate (to 80% Residual Capacity)	2,000@100% DoD / 4,000@80% DoD / 7,000@50% DoD @25°C operating temp.
Maximum continuous Charge Current	40A (0.5C)	Projected cycles at 91% DoD	2,800 cycles
Maximum continuous Discharge Current	63A	Round Trip Efficiency	>96%
Maximum Current	63A (Limited by circuit breaker)	Parallel connection	from 4.1kWh to 100kWh+
Power (kW)	approx. 3kW	Expected Life @25°C	>10 years when used as per warranty terms
Recommended operating voltage range	48.0 - 57.6 Vdc		
Environmental Characteristics			
Ambient Temperature Range (optimal)	0° to 45°C	Operating Humidity (Non condensating)	85%
Operating Temperature Range of battery cells	Charge: 0°-50°C / Discharge -20° -60°C	Altitude	Below 2000m
Cooling	Natural convection		
Physical Characteristics			
Battery Mounting Options	Standard 19" Rack + Horizontal, Vertical or on either side	Battery Dimensions	725mm D x 438mm W x 88mm H
Battery Terminal Connections	Amphenol Surlok 100A Non Keyed	Battery Weight	42.5kg
Battery Circuit Breaker	2-Pole 63A 360VDC (K Curve)	IP Rating	IP20
Safety Parameters and Certification			
Short-circuit current	350amps per battery in parallel	Certification - TROPPO 4841 Battery	IEC:62619:2017
Lithium Composition	Lithium Ferro Phosphate (LiFePO4 or LFP)	Certification - LiFePO4 3,800mAh Cell	IEC:62619:2017, UN38.3
Battery Management System (BMS) Protection Settings			
Battery Type and series combination	LiFePO4 (16S)	High temperature - discharge protection	60±3°C
BMS Over-Volt cut off	62.4V	High temperature - charge protection	50±3°C
BMS Under-Volt cut off	40±2V	Low temperature - discharge protection	-20±3°C
Charging over-current protection	45±6A	Low temperature - charge protection	0±3°C
Discharge over-current protection (2 levels)	250±60A / 350±100A	Cell balancing method	Passive equalisation

Note: In our efforts towards constant product enhancement this specification is subject to change to at anytime without notice



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