

TROPPO ULTRA-5156 BATTERY DATASHEET



1. PRODUCT SPECIFICATION

Product Name:	Lithium Ion Battery
Product Model	Troppo ULTRA-5156
Country of manufacture	Australia

2. BATTERY MODULE SPECIFICATION

ELECTRICAL PERFORMANCE	
Rated voltage	51.2 Vdc
Rated capacity	110 Ah 5.6 kWh
Voltage range	40V ~ 57.6 V
Charge current	≤ 100 A
Discharge current	≤ 100 A
Peak/Max current	1.5C @10 s
Communication	RS485 / CAN
Cycle times	2200+ Times @ 80%DOD
Extended quantity	Up to 32pcs (179 kWh)
Rated DC power	5.1 kW
Battery Depth of Discharge	90% DoD
Usable battery capacity	5.04 kWh
Battery Max Charge/Discharge Power	5.1 kW
ENVIRONMENT & OTHERS	
IP level	IP40 - – Indoor only
Charge temperature	0°C ~ 50°C
Discharge temperature	-20°C ~ 60°C
Storage temperature	-20°C~ 45°C
Warranty	10 years

3. BATTERY CELL SPECIFICATION



No.	Item	Standard	Note
1	Normal capacity	5.0 Ah	25°C Ambient, 0.5C Rate
2	Min Capacity	4.96 Ah	25°C Ambient, 0.5C Rate
3	Impedance @1KHz	≤20 mΩ AC	1kHz ACIR
		≤35 mΩ AC	25°C 50%SOC 2C (10A) discharge for 10s
4	Charge temperature	0°C~55°C	Cell temperature
5	Discharge temperature	-20°C~60°C	Cell temperature
6	Storage temperature range	-20°C~45°C	6months / 25%~40%SOC ≤85%RH / No condensation
7	Max charge voltage	3.65 V	25±2°C Ambient
8	Standard charge rate	0.5C (2.5 A)	25±2°C Ambient
9	Maximum charge rate	1.0C (5 A)	25±2°C Ambient
10	Discharge cut-off volt	2.0 V	25±2°C Ambient
11	Standard discharge rate	0.5C (2.5A)	25±2°C Ambient
12	Max continuous discharge rate	2.0C (10A)	25±2°C Ambient

4. BMS SPECIFICATION

	➤ Touchscreen LCD ➤ Enclosed cabling and networking compartment ➤ Multi-way Closed Loop Comm with inverters ➤ Integrated RPSD ➤ RS485/RS232 communication
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Item	Parameters
Cell string range	16S
Abnormal high voltage	3900 mV
Over-charge voltage	3750 mV
Over-discharge voltage	2500 mV
Balance open voltage	3500 mV
Pre-charge open voltage	2400 mV
Forbid charge @low voltage	2000 mV
Over-current protection-Charge	100 A or 20 mV
Over-current protection-discharge (1)	100 A or 20 mV
Over-current protection-discharge (2)	30 mV
Short-circuit protection	50 mV
Current limitation protection	100 A
Charge-High temperature	60°C
Charge-Low temperature	0°C
Discharge-High temperature	65°C
Discharge-Low temperature	-20°C
MOSFET-High temperature	80°C
MOSFET-Low temperature	-20°C