

High Energy Type

15.1kWh Battery Module



- › Highly versatile air cooling module suitable for a wide range of applications
- › Excellent power-to-energy balance
- › Modular design combined with high scalability
- › High reliability and unparalleled safety
- › Long cycle and calendar life (Over 8,000 cycles and up to 15 years*)
- › Efficient thermal management via air vent holes
- › Easy to transport, install, and maintain
- › Cell balancing and monitoring via advanced BMS**

*Depending on the load profile, the warranty condition may differ / **BMS: Battery Management System

Module Specification

Model: KBM-255P-F-20S-HE-103-151-EM-C

Item	Specification	Remarks	
Electrical			
Module Configuration	2P20S	Cell:130255255G1 (103Ah)	
Installed Energy	15.1kWh	-	
Usable Energy	13.9kWh	@ 0.5P discharge, BOL	
Nominal Voltage	73.6Vdc	-	
Operating Voltage Range	67 ~ 82.6Vdc	-	
Max. Charge Power	15.1kW	@ 1P, 1 Cycle	
Max. Charge Current	206A	@ 1C, 1 Cycle	
Rated Charge Power	7.5kW	@ 0.5P	
Rated Charge Current	103A	@ 0.5C	
Peak Discharge Power	30.3kW	@ 2P, ≤10 sec, ≥SOC 50%	
Peak Discharge Current	412A	@ 2C, ≤10 sec, ≥SOC 50%	
Max. Discharge Power	15.1kW	@ 1P, 1 Cycle	
Max. Discharge Current	206A	@ 1C	
Rated Discharge Power	7.5kW	@ 0.5P	
Rated Discharge Current	103A	@ 0.5C	
Round Trip DC Efficiency	>95%	@ 0.5P, BOL	
Control Power	DC 24V External Power	-	
Mechanical			
Dimension	310 (W) x 687 (D) x 318 (H) mm	± 2mm	
Weight	Approx. 96kg	-	
Communication			
Communication Interface	CAN2.0B	BPU required	
Environment			
Operating Temperature	Charging	0 ~ 10°C	@ <0.2P
		10 ~ 35°C	@ <1P
		35 ~ 45°C	@ <0.5P
	Discharging	0 ~ 55°C	-
Operating Temperature		22 ~ 28°C	Recommended
Storage Humidity		<60 ± 25% RH	Non-condensing
Storage Temperature	1 Year	-20 ~ 25°C	SOC 50 ± 5%
	6 Months	25 ~ 35°C	
	3 Months	35 ~ 45°C	
	< 1 Week	45 ~ 60°C	
Expected Cycle & Calendar Life**			
Cycle Life @ DoD 90%	≥6,000 cycles	@ 25±3°C, 1C/1C, SOH 70%	
Cycle Life @ DoD 80%	≥8,000 cycles	@ 25±3°C, 1C/1C, SOH 70%	
Calendar Life	Up to 15 years		
Certification			
Certification	UL1642, UL1973, CB, UN38.3	@ Cell Level	
	UL9540A	@ Cell Level, Available by 4Q 2020	

*P : Power-rate / C : Current-rate

**Depending on the load profile, the warranty condition may differ

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