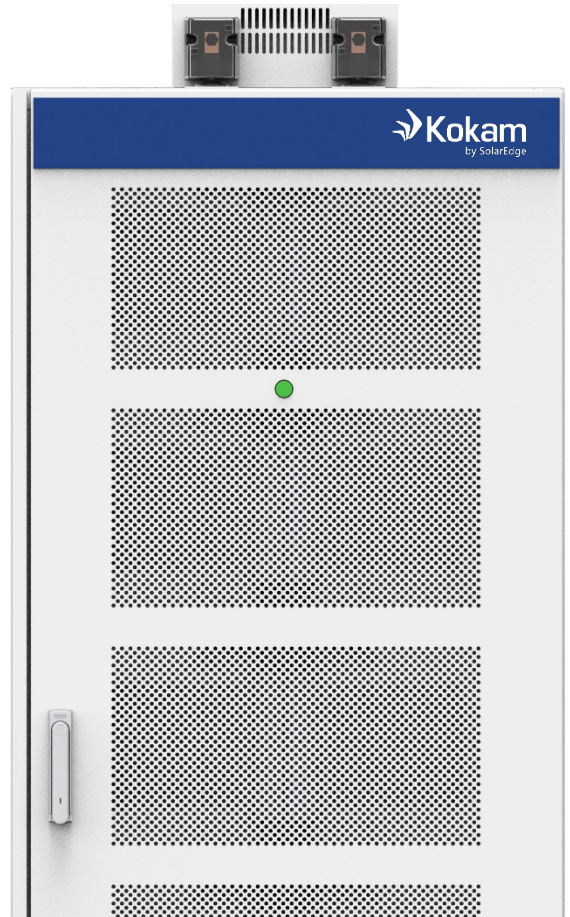


Ultra High Power Type

111kWh Battery Rack



- › Industry-leading high power performance (Up to 888 kW)
- › Pre-assembled solution for ease of installation and maintenance
- › Optimized thermal management via air cooling
- › High reliability and unparalleled safety
- › Long cycle and calendar life (Over 8,000 cycles and up to 15 years*)
- › Scalable up to multiple MWh with virtually no limit
- › Highly intelligent BMS** for sophisticated system control and monitoring

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

**BMS: Battery Management System

Battery Rack Specification

Model: KRI-2C5R-C-200S-UHP-111

Item	Specification	Remarks	
Electrical			
Rack Configuration	10 modules in series	Cell: 130255255P (75Ah)	
Installed Energy	111kWh	-	
Usable Energy	102kWh	@ 1P discharge, BOL	
Nominal Voltage	740Vdc	-	
Operating Voltage Range	660 ~ 826Vdc	-	
Max. Charge Power	333kW	@ 3P, 1 Cycle	
Max. Charge Current	450A	@ 3C, 1 Cycle	
Rated Charge Power	111kW	@ 1P	
Rated Charge Current	150A	@ 1C	
Peak Discharge Power	888kW	@ 8P, ≤10 sec, ≥SOC 50%	
Peak Discharge Current	1,200A	@ 8C, ≤10 sec, ≥SOC 50%	
Max. Discharge Power	366kW	@ 3.3P, 1 Cycle	
Max. Discharge Current	495A	@ 3.3C, 1 Cycle	
Rated Discharge Power	111kW	@ 1P	
Rated Discharge Current	150A	@ 1C	
Round Trip DC Efficiency	>95%	@ 1P, BOL	
Control Power	AC 100~240V	-	
Mechanical			
Dimension	785 (W) x 730 (D) x 2,300 (H) mm	± 5%, incl. Fuse Box	
Weight	1,300kg	± 5%	
IP Grade	20	-	
Communication			
Communication Interface	Ethernet/RS-485/CAN2.0B	ModBus TCP/ ModBus RTU	
Monitoring	RS-232C	-	
Environment			
Operating Temperature	Charge	0 ~ 10°C	@ <0.2P
		10 ~ 35°C	@ <2P
		35 ~ 45°C	@ <1P
	Discharge	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	-	
Certifications			
Certifications	UL1642, UL1973, CE, UN38.3	@ Cell level	
	CE	@ Module level	

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

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

Offered Solution

System Config.*	Installed Energy	Nominal Voltage	Operating Voltage	Rated Charge Power	Rated Discharge Power	Max Charge Power	Max Discharge Power	Max Discharge Current	BCP** Required	No. of Banks***
2 Racks	222kWh	740Vdc	660 ~ 826Vdc	222kW	222kW	666kW	732kW	990A	Y	1
3 Racks	333kWh	740Vdc	660 ~ 826Vdc	333kW	333kW	999kW	1098kW	1485A	Y	1
4 Racks	444kWh	740Vdc	660 ~ 826Vdc	444kW	444kW	1332kW	1465kW	1980A	Y	1
5 Racks	555kWh	740Vdc	660 ~ 826Vdc	555kW	555kW	1665kW	1831kW	2475A	Y	1
6 Racks	666kWh	740Vdc	660 ~ 826Vdc	666kW	666kW	1998kW	2197kW	2970A	Y	1
7 Racks	777kWh	740Vdc	660 ~ 826Vdc	777kW	777kW	2331kW	2564kW	3465A	Y	1
8 Racks	888kWh	740Vdc	660 ~ 826Vdc	888kW	888kW	2664kW	2930kW	3960A	Y	1
9 Racks	999kWh	740Vdc	660 ~ 826Vdc	999kW	999kW	2997kW	3296kW	4455A	Y	2
10 Racks	1110kWh	740Vdc	660 ~ 826Vdc	1110kW	1110kW	3330kW	3663kW	4950A	Y	2
11 Racks	1221kWh	740Vdc	660 ~ 826Vdc	1221kW	1221kW	3663kW	4029kW	5445A	Y	2
12 Racks	1332kWh	740Vdc	660 ~ 826Vdc	1332kW	1332kW	3996kW	4395kW	5940A	Y	2
13 Racks	1443kWh	740Vdc	660 ~ 826Vdc	1443kW	1443kW	4329kW	4761kW	6435A	Y	2
14 Racks	1554kWh	740Vdc	660 ~ 826Vdc	1554kW	1554kW	4662kW	5128kW	6930A	Y	2
15 Racks	1665kWh	740Vdc	660 ~ 826Vdc	1665kW	1665kW	4995kW	5494kW	7425A	Y	2
16 Racks	1776kWh	740Vdc	660 ~ 826Vdc	1776kW	1776kW	5328kW	5860kW	7920A	Y	2
17 Racks	1887kWh	740Vdc	660 ~ 826Vdc	1887kW	1887kW	5661kW	6227kW	8415A	Y	3
18 Racks	1998kWh	740Vdc	660 ~ 826Vdc	1998kW	1998kW	5994kW	6593kW	8910A	Y	3
19 Racks	2109kWh	740Vdc	660 ~ 826Vdc	2109kW	2109kW	6327kW	6959kW	9405A	Y	3
20 Racks	2220kWh	740Vdc	660 ~ 826Vdc	2220kW	2220kW	6660kW	7326kW	9900A	Y	3
21 Racks	2331kWh	740Vdc	660 ~ 826Vdc	2331kW	2331kW	6993kW	7692kW	10395A	Y	3
22 Racks	2442kWh	740Vdc	660 ~ 826Vdc	2442kW	2442kW	7326kW	8058kW	10890A	Y	3
23 Racks	2553kWh	740Vdc	660 ~ 826Vdc	2553kW	2553kW	7659kW	8424kW	11385A	Y	3
24 Racks	2664kWh	740Vdc	660 ~ 826Vdc	2664kW	2664kW	7992kW	8791kW	11880A	Y	3
25 Racks	2775kWh	740Vdc	660 ~ 826Vdc	2775kW	2775kW	8325kW	9157kW	12375A	Y	4
26 Racks	2886kWh	740Vdc	660 ~ 826Vdc	2886kW	2886kW	8658kW	9523kW	12870A	Y	4
27 Racks	2997kWh	740Vdc	660 ~ 826Vdc	2997kW	2997kW	8991kW	9890kW	13365A	Y	4
28 Racks	3108kWh	740Vdc	660 ~ 826Vdc	3108kW	3108kW	9324kW	10256kW	13860A	Y	4
29 Racks	3219kWh	740Vdc	660 ~ 826Vdc	3219kW	3219kW	9657kW	10622kW	14355A	Y	4
30 Racks	3330kWh	740Vdc	660 ~ 826Vdc	3330kW	3330kW	9990kW	10989kW	14850A	Y	4

*Depending on customer requirements, more than 30 racks can be connected in parallel.

**BCP: Battery Connection Panel (Incl. switch disconnecter, system BMS)

***Depending on operational requirements, the number of Banks may vary. One BCP is required per Bank.

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