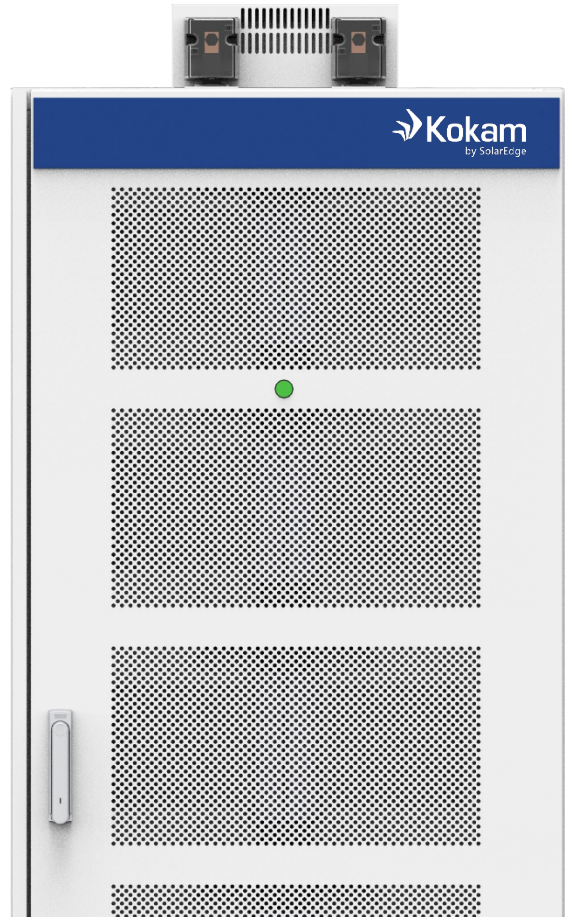


High Power Type

125kWh Battery Rack



- › Exceptionally high power performance (Up to 750kW)
- › 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-HP-125

Item	Specification	Remarks	
Electrical			
Rack Configuration	10 modules in series	Cell: 125255255G1H (85Ah)	
Installed Energy	125kWh	-	
Usable Energy	115kWh	@ 1P discharge, BOL	
Nominal Voltage	736Vdc	-	
Operating Voltage Range	660 ~ 826Vdc	-	
Max. Charge Power	362kW	@ 2.9P, 1 Cycle	
Max. Charge Current	493A	@ 2.9C, 1 Cycle	
Rated Charge Power	125kW	@ 1P	
Rated Charge Current	170A	@ 1C	
Peak Discharge Power	750kW	@ 6P, ≤10 sec, ≥SOC 50%	
Peak Discharge Current	1,020A	@ 6C, ≤10 sec, ≥SOC 50%	
Max. Discharge Power	362kW	@ 2.9P, 1 Cycle	
Max. Discharge Current	493A	@ 2.9C, 1 Cycle	
Rated Discharge Power	125kW	@ 1P	
Rated Discharge Current	170A	@ 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, CB, UN38.3	@ Cell level	
	UL1973	@ Cell level, available by 3Q 2020	
	UL9540A	@ Cell level, available by 4Q 2020	

*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	250kWh	736Vdc	660 ~ 826Vdc	250kW	250kW	725kW	725kW	986A	Y	1
3 Racks	375kWh	736Vdc	660 ~ 826Vdc	375kW	375kW	1087kW	1087kW	1479A	Y	1
4 Racks	500kWh	736Vdc	660 ~ 826Vdc	500kW	500kW	1450kW	1450kW	1972A	Y	1
5 Racks	625kWh	736Vdc	660 ~ 826Vdc	625kW	625kW	1812kW	1812kW	2465A	Y	1
6 Racks	750kWh	736Vdc	660 ~ 826Vdc	750kW	750kW	2175kW	2175kW	2958A	Y	1
7 Racks	875kWh	736Vdc	660 ~ 826Vdc	875kW	875kW	2537kW	2537kW	3451A	Y	1
8 Racks	1000kWh	736Vdc	660 ~ 826Vdc	1000kW	1000kW	2900kW	2900kW	3944A	Y	1
9 Racks	1126kWh	736Vdc	660 ~ 826Vdc	1126kW	1126kW	3265kW	3265kW	4437A	Y	2
10 Racks	1251kWh	736Vdc	660 ~ 826Vdc	1251kW	1251kW	3627kW	3627kW	4930A	Y	2
11 Racks	1376kWh	736Vdc	660 ~ 826Vdc	1376kW	1376kW	3990kW	3990kW	5423A	Y	2
12 Racks	1501kWh	736Vdc	660 ~ 826Vdc	1501kW	1501kW	4352kW	4352kW	5916A	Y	2
13 Racks	1626kWh	736Vdc	660 ~ 826Vdc	1626kW	1626kW	4715kW	4715kW	6409A	Y	2
14 Racks	1751kWh	736Vdc	660 ~ 826Vdc	1751kW	1751kW	5077kW	5077kW	6902A	Y	2
15 Racks	1876kWh	736Vdc	660 ~ 826Vdc	1876kW	1876kW	5440kW	5440kW	7395A	Y	2
16 Racks	2001kWh	736Vdc	660 ~ 826Vdc	2001kW	2001kW	5802kW	5802kW	7888A	Y	2
17 Racks	2127kWh	736Vdc	660 ~ 826Vdc	2127kW	2127kW	6168kW	6168kW	8381A	Y	3
18 Racks	2252kWh	736Vdc	660 ~ 826Vdc	2252kW	2252kW	6530kW	6530kW	8874A	Y	3
19 Racks	2377kWh	736Vdc	660 ~ 826Vdc	2377kW	2377kW	6893kW	6893kW	9367A	Y	3
20 Racks	2502kWh	736Vdc	660 ~ 826Vdc	2502kW	2502kW	7255kW	7255kW	9860A	Y	3
21 Racks	2627kWh	736Vdc	660 ~ 826Vdc	2627kW	2627kW	7618kW	7618kW	10353A	Y	3
22 Racks	2752kWh	736Vdc	660 ~ 826Vdc	2752kW	2752kW	7980kW	7980kW	10846A	Y	3
23 Racks	2877kWh	736Vdc	660 ~ 826Vdc	2877kW	2877kW	8343kW	8343kW	11339A	Y	3
24 Racks	3002kWh	736Vdc	660 ~ 826Vdc	3002kW	3002kW	8705kW	8705kW	11832A	Y	3
25 Racks	3128kWh	736Vdc	660 ~ 826Vdc	3128kW	3128kW	9071kW	9071kW	12325A	Y	4
26 Racks	3253kWh	736Vdc	660 ~ 826Vdc	3253kW	3253kW	9433kW	9433kW	12818A	Y	4
27 Racks	3378kWh	736Vdc	660 ~ 826Vdc	3378kW	3378kW	9796kW	9796kW	13311A	Y	4
28 Racks	3503kWh	736Vdc	660 ~ 826Vdc	3503kW	3503kW	10158kW	10158kW	13804A	Y	4
29 Racks	3628kWh	736Vdc	660 ~ 826Vdc	3628kW	3628kW	10521kW	10521kW	14297A	Y	4
30 Racks	3753kWh	736Vdc	660 ~ 826Vdc	3753kW	3753kW	10883kW	10883kW	14790A	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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