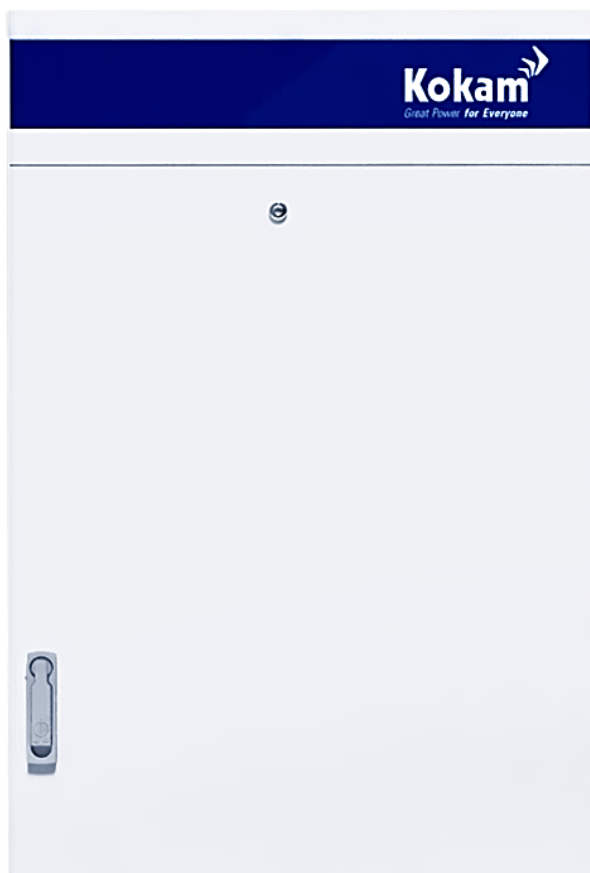


High Power Type

41.2kWh Battery Rack



- › Highly advanced lithium-ion battery solution for mission-critical applications
- › Exceptionally high power performance (Up to 9 C-rate)
- › Exceedingly small footprint due to high energy density
- › 2-pole and 3-pole topology available
- › Long cycle and calendar life (Over 8,000 cycles and up to 15 years¹)
- › Highly intelligent BMS² for sophisticated system control and monitoring

1. Depending on the load profile, the warranty condition may differ / 2. BMS: Battery Management System
*The image above is a reference, and the actual product may differ from the above image

Battery Rack Specification

Model: KST041485A14ADC00 (Previous Model Name: KUPS-1C4R-132S-HP-41-P04-F06)

Item	Specification		Remarks
Electrical			
Configuration	Rack	4 modules in series	-
	Module	1P33S	10.3kWh / KMD255103P133A0
	Cell	High Power	85Ah / KCL255085PN0
Installed Energy		41.2kWh	-
Usable Energy ¹		37.9kWh	@ 1P discharge, BOL
Nominal Voltage		485.7Vdc	-
Operating Voltage Range		422.4 ~ 545.1Vdc	-
Float Voltage		539.8Vdc	-
Charging	Power	Rated	41.2kW
		Max ²	82.5kW
	Current	Rated	85.0A
		Max ²	170.0A
Discharging	Power	Rated	41.2kW
		Max ²	242.8kW
			289.0kW
		Peak	330.3kW
	Current	Rated	85.0A
		Max ²	500.0A
			595.0A
		Peak	680.0A
Round Trip DC Efficiency		>95%	@ 1P, BOL
Control Power		DC 24V	-
Mechanical			
Dimension		580 (W) x 740 (D) x 1,960 (H) mm	± 5mm
Weight		Approx. 542kg	± 5%
IP Grade		20	-
Communication			
Communication Interface		Ethernet/RS-485	Modbus TCP/ Modbus RTU
Monitoring		RS-232C	-
Operating Conditions			
Operating Temperature ³	Charging	0 ~ 10°C	<0.2P
		10 ~ 35°C	<2P
	35 ~ 45°C	<1P	
	Discharging	0 ~ 55°C	-
Environment			
Ambient Temperature		23±5°C	-
Storage Humidity		<60±25% RH	Non-condensing
Storage Temperature ⁴	1 Year	-20 ~ 25°C	30≤ SOC ≤50%
	6 Months	-20 ~ 35°C	
	3 Months	-20 ~ 45°C	
	<1 Week	-20 ~ 60°C	
Expected Cycle & Calendar Life⁵			
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	@ 25±3°C, SOC ≤80%, SOH 70%
Certification & Compliance			
Certifications ⁶		UL 1642, UL 1973, IEC 62619, UL 9540A, UN 38.3	Cell level
		CE, IEC 62619, UN 38.3	Module level
		CE, IEC 62619, IEC 60730-1 Annex H	Rack level
Compliance		RoHS II, REACH	-

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

1. The usable energy may change depending on the calendar life of the battery cells.

2. After max. charging or discharging, it is recommended to rest the battery rack until the cell temperature returns to 23±5°C.

3. Operating temperature is based on the cell temperature.

4. When resting the battery system after an operation for longer than 1 month, the user shall ensure that the SOC is above 30%. The ambient temperature shall be controlled at 23±5°C when resting the battery system. During storage, the temperature and SOC conditions shall always be adhered to.

5. Cycle and calendar life shall be depending on the load profile, and the warranty condition may differ according to Kokam Limited Product Warranty.

6. Certification update (incl. model name). Expected to be completed in 1Q 2022.

DISCLAIMERS OF WARRANTIES:

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