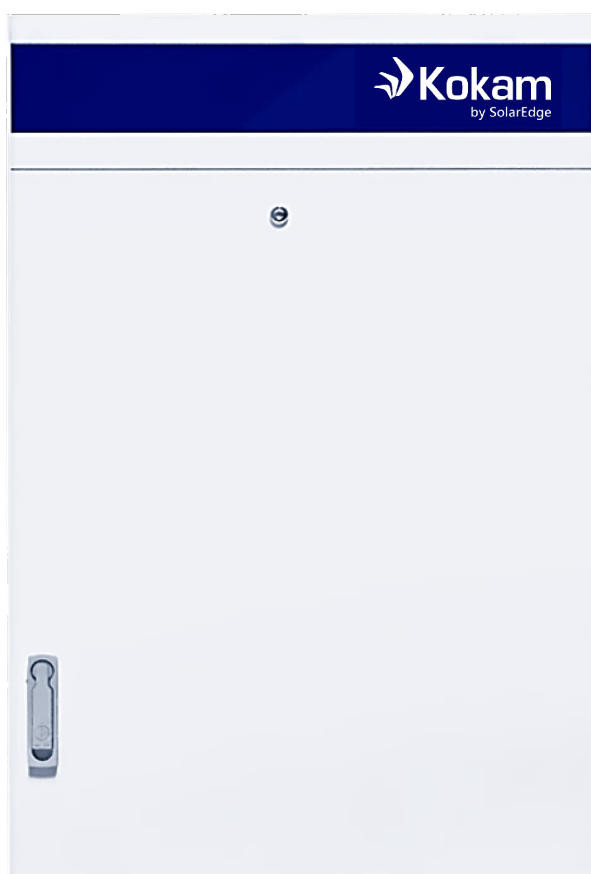


High Power Type

41kWh Battery Rack



- › Highly advanced lithium-ion battery solution for mission-critical applications
- › Exceptionally high power performance (Up to 6 C-rate)
- › Pre-assembled solution for ease of installation and maintenance
- › Exceedingly small footprint due to high energy density
- › 2-pole and 3-pole topology available
- › High reliability and unparalleled safety
- › Long cycle and calendar life (Over 8,000 cycles and up to 15 years*)
- › 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: KUPSI-1C4RT2-41-UP

Item	Specification	Remarks	
Electrical			
Rack Configuration	4 modules in series	Cell: 120255255G1H (85Ah)	
Module Configuration	1P33S	-	
Installed Energy	41kWh	-	
Usable Energy	37kWh	@ 1P discharge, BOL	
Nominal Voltage	485Vdc	-	
Operating Voltage Range	422 ~ 545Vdc	-	
Float Voltage	545Vdc	-	
Max. Charge Power	82kW	@ 2P, 1 Cycle	
Max. Charge Current	170A	@ 2C, 1 Cycle	
Rated Charge Power	41kW	@ 1P	
Rated Charge Current	85A	@ 1C	
Max. Discharge Power**	247kW	@ 6P, ≤10 min., 1 Cycle	
Max. Discharge Current**	510A	@ 6C, ≤10 min., 1 Cycle	
Rated Discharge Power	41kW	@ 1P	
Rated Discharge Current	85A	@ 1C	
Round Trip DC Efficiency	>95%	@ 1P, BOL	
Control Power	AC 100~240V, 50/60Hz	1ph, 2 wire	
Mechanical			
Dimension	580 (W) x 740 (D) x 1,960 (H) mm	-	
Weight	Approx. 546kg	-	
IP Grade	20	-	
Communication			
Communication Interface	Ethernet/RS-485	ModBus TCP/ModBus RTU	
Monitoring	RS-232C	-	
Environment			
Operating Temperature	Charging	0 ~ 10°C	@ <0.2P
		10 ~ 35°C	@ <2P
		35 ~ 45°C	@ <1P
	Discharging	0 ~ 55°C	-
Operating Temperature		18 ~ 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 project specific back-up time requirement, these values may change (5-30 min.)

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

DISCLAIMERS OF WARRANTIES:

All materials and services on this document are provided "as is" without warranty of any kind, either express or implied, including, but not limited to, the implied warranties of merchantability or fitness for a particular purpose, or the warranty of non-infringement. This document could include technical or other mistakes, inaccuracies or typographical errors. Kokam assumes no responsibility for errors or omissions in the information, documents, software, materials and/or services which are referenced by or linked to this document. Kokam does not grant any express or implied right to any person or business entity under any patents, copyrights, trademarks, or trade secret information with respect to the materials and services. No portion of the information or documents may be reproduced in any form or by any means without the prior written consent of kokam. In no event shall kokam be liable to any person or business entity for any special, punitive, incidental, indirect or consequential damages based on any use of this document.