

KuBank C&I Energy Storage System S-247-2h-IEC

KuBank is a modular, flexible and cost-effective kWh-scale C&I battery energy storage system. Multiple units can be connected in parallel. This product is designed to meet energy storage needs for today and for the future.

KEY FEATURES

BMS

Cost-effective and long service life.

Integrated, modular design, adapt to different application scenarios, convenient installation, and flexible commissioning.

Active balancing BMS on pack and rack level, with 2A balance current releasing more energy and extends the lifespan.

Liquid cooling technology with cell temperatures being controlled within the optimal operating range, temperature difference $< 3^{\circ}C$.

Battery pack IP67 seal grade avoids dust, moisture, and water condensation.

Multi-stage thermal management technology effectively prevents battery heat spread and improves the safety.

Multi-level fire detection monitors early thermal runaway of cells.

Built-in peak shaving, demand management and other operational control modes; operational data can be accessed via 5G, LAN, etc. to the cloud, enabling unattended operation and maintenance efficiency.



PRODUCT CERTIFICATES*

IEC62619, IEC61000, UN38.3 CE-safety, IEC/EN/BS 62477-1, EN 62920, IEC 61000, VDE-4110, VDE-4105, EN50549-1, NC Rfg TYPE B, CEI 0-16, CEI 0-21

*The specific certificates applicable to each market, and not all certifications listed herein will simultaneously apply to the products you order or use. Please contact your local Canadian Solar sales representative to confirm the specific certificates applicable in the regions in which the products will be used.

CSI Solar Co., Ltd. is committed to providing high quality solar photovoltaic modules, solar energy and battery storage solutions to customers. The company was recognized as the No. 1 module supplier for quality and performance/price ratio in the IHS Module Customer Insight Survey. Over the past 23 years, it has successfully delivered over 133 GW of premium-quality solar modules across the world.

As a part of Canadian Solar, we recognize the crucial role of battery storage systems in achieving a sustainable future. We offer a suite of proven, flexible, turnkey energy storage solutions, providing our clients with a streamlined and efficient experience. Our team of experienced engineers and project managers is focused to ensure the best overall value for each project, through advanced technology and system flexibility while backed by our experience, bankability, coverage, and commitment to providing the highest level of support, quality, safety, and superior performance.



SYSTEM PARAMETER

	DC Parameters	
	CSI-KuBank-S-247-2h-IEC	
Battery Chemistry	Lithium Iron Phosphate (LFP)	
Pack Configuration	1P69S (69 Cells)	
System Configuration	1P276S (4 Packs)	
DC Voltage (Nominal)	883.2 V	
DC Voltage Range ¹	772.8 V ~ 993.6 V	
Rated Energy Capacity	247 kWh	
Max. Short Circuit Current	9kA	
Charging/Discharging Mode	0.5 P / 0.5 P	
AC Parameters		
Rated AC Power	100 KVA	
Max.AC Power	110 kVA	
Nominal AC voltage	400Vac	
AC voltage range	340 to 440 Vac (settable)	
Nominal grid frequency	50/60 Hz (settable)	
Frequency Range	45-55/55-65	
Current THD	<3% (at rated power)	
Power Factor	-1 ~ 1,continuously adjustable	
	General	
Duration @Rated Power	2 hrs	
AC Round Trip Efficiency	≥ 90%	
Control Backup	2-hrs UPS for control system including BMS, installed in the cabinet	
Operating Temperature (Ambient)	-30 °C to 55 °C	
Relative Humidity	≤95% (non-condensing)	
Communication Interface	Ethernet / RS485 / CAN	
Communication Protocol	Modbus TCP / Modbus RTU / CAN 2.0	
Certifications	IEC/EN/BS 62477-1, EN/BS 61000-6-2/-4, UN38.3	
Design Standards/Codes	IEC62619, IEC61000, NFPA69, IEC62933	
Enclosure	Non-standard sheet metal	
Dimensions (W*H*D)	1550*2280*2100mm	
Weight (Battery Included)	3400kg	
Altitude	< 2000 m (derating between 2000 m ~ 4000 m)	
Enclosure Ingress Rating	IP54 / NEMA 3R	
Painting/Coating	RAL9003	
Seismic Parameter	Zone 4	
Noise @1m distance	≤ 75 dB	
Fire Detection and Alarm	Combustible gas detection and smoke detection, Sound and Strobe alarm, Deflagration panel	
Fire Suppression	Aerosol-based fire suppression system	
Emergency Stop/Shut-off	Local and remote	

1. Unit is rated at 772.8V-993.6V for optimized product performance, maximum voltage range value for battery system is 703.8V-993.6V

2. The rated operating power of a single unit subject to a maximum of 8 units connected in parallel

* The technical parameters contained in this technical data document may deviate slightly, and Canadian Solar does not guarantee that they are completely accurate. Due to continuous innovation, research and development and product improvement, Canadian Solar reserves the right to adjust the information in this technical parameter document at any time without prior notice. The customer should obtain the latest version of the technical parameter document when signing the contract and make it an integral part of the binding contract signed by both parties.

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