

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



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 $< 3^{\circ}\text{C}$.



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/EN 61000 (EMC),
VDE-4110, VDE-4105, EN50549-1, NC Rfq, TYPE B

*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.

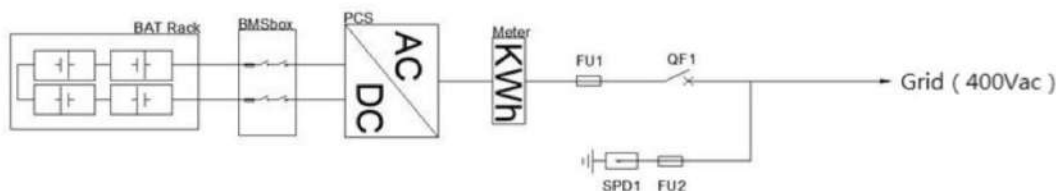
CSI Solar Co., Ltd. is committed to providing high quality solar photovoltaic modules, solar energy and battery storage solutions to customers. The company was recognized as the No. 1 module supplier for quality and performance/price ratio in the IHS Module Customer Insight Survey. Over the past 20 years, it has successfully delivered over 67 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.

CSI Energy Storage Co., Ltd.

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CIRCUIT DIAGRAM



SYSTEM PARAMETER

DC Parameters

Battery Chemistry	CSI-KuBank-S-247-2h-IEC
Pack Configuration	Lithium Iron Phosphate (LFP)
System Configuration	1P69S (69 Cells)
DC Voltage (Nominal)	1P276S (4 Packs)
DC Voltage Range ¹	883.2 V _{dc}
Rated Energy Capacity	772.8 V _{dc} ~ 993.6 V _{dc}
Max. Short Circuit Current	247 kWh
Charging/Discharging Mode	9kA
	0.5 P / 0.5 P

AC Parameters

Rated AC Power	100 kW
Max.AC Power	110 kW
Nominal AC voltage	400Vac (3P+PE)
AC voltage range	340 to 440 Vac (settable)
Nominal grid frequency	50Hz
Frequency Range	45-55/55-65
Current THD	<3% (at rated power)
Power Factor	-1 ~ 1, continuously adjustable

General

Auxiliary Power Supply	230Vac (1P+N+PE)
Auxiliary Current	20A
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)	≤3600kg
Altitude	< 2000 m (derating between 2000 m ~ 4000 m)
Enclosure Ingress Rating	IP54 / NEMA 3R
Painting/Coating	RAL9003
Seismic Parameter	Zone 4
Noise Level @1m	≤ 75 dB
Fire Detection and Alarm	Combustible gas detection and smoke detection, Sound and light alarm, Deflagration venting
Fire Suppression	Aerosol-based fire suppression system option available
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

PARTNER SECTION

contract and make it an integral part of the binding contract signed by both parties.

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