

e-STORAGE

A subsidiary of Canadian Solar

UTILITY-SCALE ENERGY STORAGE



FlexBank 1.0

ENERGY STORAGE SYSTEM

S-8360-2H | S-8360-4H

Capacity: 8.36 MWh

e-STORAGE, a subsidiary of **Canadian Solar**, is a world-class energy storage solution provider, specializing in storage system design, manufacturing, and integration of battery energy storage systems for utility-scale applications.

The company offers value-added system consulting and turnkey EPC services, in addition, we provide customers with our proprietary LFP battery solution FlexBank.

Together, we are building a brighter, greener future for all.

Key Features

Modular Design

- A modular open-frame structure, which simplifies product shipment, meet the transportation needs of different regions
- Compatible with all major inverter solutions, providing maximum flexibility for initial system sizing and future augmentation.

Compatibility & Installation

- Modular design enabled by Flex Mount Skid, allowing modular shipping, rapid on-site assembly, and fast commissioning.
- Support side by side and back-to-back installation, Reduces EPC cost, supporting versatile installation configurations with enhanced project energy density.

FlexBank 1.0 Highlights

- **Cutting-Edge Technology:** An energy storage system can offer an expandable capacity up to 8.36 MWh and up to 20 years lifespan. It uses 314Ah cells with best balance of high performance and reliability and is compactly integrated within flexible modular cabinet.
- **Compliance and Certifications:** FlexBank 1.0 adheres to all industry standards: IEC62619, IEC63056, IEC62477-1, IEC62933-5-2, IEC61000-6-2, UL9540A, NFPA69, NFPA855 and UN38.3/UN3536, ensuring rigorous safety and performance criteria.

Safety

- Three level electrical protection, ensure system security
- Heat bridge barrier technology, provide reliable protection under extreme condition

Intelligent Control

- Features advanced cell-level precision management, which maximizes early risk warnings, enhancing overall system stability and balance

Market Recognition

- Share the same battery and pack supply chain with SolBank3.0, market-tested performance and reliability.



FlexBank 1.0
Flex Cabinet Parameter

General		
Product Model	CSI-FlexBank-C-1672-2h	
	CSI-FlexBank-C-1672-4h	
Battery Capacity	314 Ah	
Battery Chemistry	Lithium Iron Phosphate (LFP)	
Module Configuration	1P104S (104 Cells)	
Rack Configuration	4*4*1P104S	
Nominal DC Voltage	1331.2 V	
Operation DC Voltage Range ⁽¹⁾	1164.8 V ~ 1497.6 V	
Charging/Discharging Mode	0.5 P / 0.5 P	0.25 P / 0.25 P
Norminal Capacity*	1672 kWh	1672 kWh
Rated DC Power ⁽²⁾	800 kW	400 kW
Rated DC Capacity ⁽³⁾	1600 kWh	1600kWh
Duration @Rated DC Power	2hrs	4hrs
Round Trip Efficiency (RTE) ⁽⁴⁾	93%	94%
Weight (Battery Included)	About 13,000 kg (28,660.09 lbs)	
Noise Sound Pressure Level (LPA) at 1 meter distance	≤75 dB(A)	

Flex Block Parameter

General (5 Cabinets)		
Product Model	CSI-FlexBank-S-8360-2h	CSI-FlexBank-S-8360-4h
Charging/Discharging Mode	0.5 P / 0.5 P	0.25 P / 0.25 P
Norminal Capacity*	8360 kWh	8360 kWh
Rated DC Power ⁽²⁾	4000 kW	2000 kW
Rated DC Capacity ⁽³⁾	8000 kWh	8000kWh
Duration @Rated DC Power	2hrs	4hrs
Round Trip Efficiency (RTE) ⁽⁴⁾	93%	94%
Operating Temperature (Ambient) ⁽⁵⁾	-30 °C to 55 °C (derating from 45°C to 55°C)	
Relative Humidity ⁽⁵⁾	≤95% (non-condensing)	
Altitude	≤4000 m (derating from 2000 m to 4000 m)	

Notes

- * Nominal capacity is a calculated number using the entire summation of the cells and their specified capacities.
- (1). The unit is rated at 1164.8V~1497.6V for optimized product performance, the maximum voltage range for the battery system is 1060.8V~1497.6V.
- (2). Rated DC Power is measured at the product DC terminal.
- (3). Rated DC Capacity represents the baseline capacity for specification and performance guarantees. The product's actual usable capacity may exceed this value to support long-term performance.
- (4). DC RTE is measured during capacity test at Rated DC Power, refer to the product warranty document for the complete procedure.
- (5). Options need to be selected to fully meet the 55°C, 95% RH.

Due to ongoing innovation, improvements, and product enhancements, the technical specifications in this document are subject to change and are not guaranteed. Canadian Solar reserves the right to update or change its products or this technical data without prior notice and customers should not rely upon these or any technical specifications which are not made part of a definitive binding agreement.



Auxiliary Systems	
Auxiliary Power Interface	3P5W AC 480/400V 60/50Hz
Thermal Management System	Smart liquid cooling/heating
External Communication Interface	Ethernet connection, Modbus TCP/IP protocol
Mechanical	
Dimensions (L*W*H)	10510*2724*3150 mm (413.78*107.24*124.02 in)
Weight (Battery Included)	About 68,000 kg (149,914.34 lbs)
Enclosure Ingress Rating	IP55 / NEMA 3R
Painting/Coating	RAL9003 / C4 Coating (C5 optional)
Seismic Parameter	Zone 4
Safety	
Fire Detection and Alarm	Fire alarm panel, heat and smoke detection, alarm bell and strobe
Explosion Prevention	Combustible gas detector with active ventilation
Uninterrupted Power Reserve	Container level UPS for 2-hr control system backup; dedicated fire safety UPS for 24-hr fire alarm backup
Emergency Stop/Automatic Shut-off	Local and Remote
Fire Suppression Options	Aerosol-based suppression system. Dry pipe sprinkler system.