

SigenStack

Innovative modular energy storage system



- Pack-level safety protection, precise thermal runaway control
- Higher energy density saves space and eases site selection
- IP66-rated design eliminates regular and complex O&M
- Pack-level active balancing, no need for on-site SOC calibration
- Modular design, stackable installation & ultra-fast commissioning

C&I Energy Storage System

SigenStack BC	M2-0.5C ¹	M2-0.5C-BST	M2-1C-BST	Units
Max. output current (to inverter)		180		A
Max. input current (from inverter)		180		A
Operating voltage range		550 ~ 1,100		V
Nominal charge/discharge current of battery	157	157	314	A
Weight	50	60	60	kg
Dimensions (W / H / D)		770 / 248 / 363		mm
Communication		CAN		
Compatible inverter	Sigen C&I Hybrid Inverter Series			

	SigenStack BAT 12.0			Units
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Performance Specification

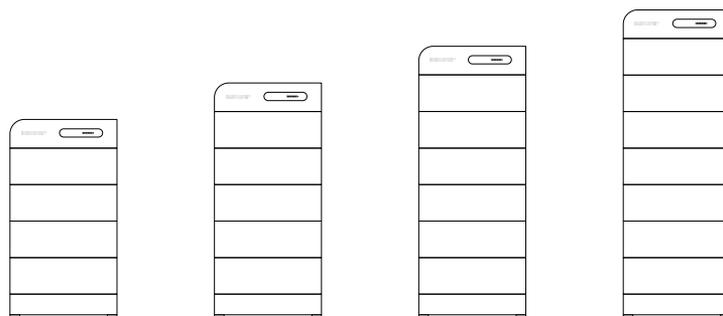
Battery type	LiFePO ₄			
Cell capacity	314			Ah
Cycle life ²	10,000			
Total energy capacity per module	12.06			kWh
Weight	105			kg
Dimensions (W / H / D)	770 / 300 / 363			mm
Nominal charge / discharge rate	0.5C			
Max. charge / discharge rate	1C			
System configuration quantity range	4 ~ 21			pcs
Max. system energy capacity	253			kWh

System General Data

Max. number of modules per stack	7			pcs
Max. number of modules per system	21			pcs
Fire suppression system	Aerosol, smoke sensor and exhausting system			
Dimensions of base (W / H / D)	770 / 195 / 363			mm
Storage temperature range	-25 ~ 60			°C
Operating temperature range	-20 ~ 55			°C
Relative humidity range	0% ~ 100%			
Max. operating altitude	4,000 (Derating at 2,000m)			m
Cooling	Smart air cooling			
System ingress protection rating	IP66			
Installation method	Floor standing			
Noise ³	< 65			dB

Standard Compliance

Standard ⁴	IEC/EN 60730-1, UN 38.3, IEC/EN 62619, IEC/EN 63056, IEC/EN 62040, UL9540A			
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Number of battery modules	4	5	6	7	pcs
Total energy capacity	48.24	60.3	72.36	84.42	kWh
Total weight	500	605	710	815	kg
Total height (with base and SigenStack BC)	1,643	1,943	2,243	2,543	mm
Total width	770				mm
Total depth	363				mm

- SigenStack BC M2-0.5C can only be used in applications where an on-grid energy storage system with ≥ 20 battery modules operates under 380/400V grid voltage and no PV connected to the inverters. For other scenarios, please utilize the battery controller with 'BST' model.
- This is provided by the battery cell manufacturer. Based on cell test condition of 25±2°C, 0.5C charge and discharge rate and SOH=60%.
- Noise level is tested based on the rated operating conditions (25 °C ambient temperature, 0.5CP charge/discharge rate, 400Vac output voltage).
- For all standards refer to the certificates category on the Sigenenergy website.
- This document reflects current technology and is subject to change without notice. Refer to the Sigenenergy website for the latest information.