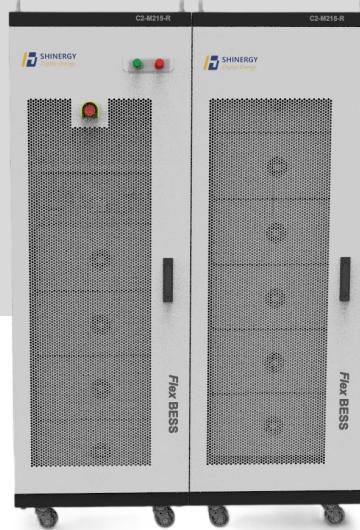


R19 Series

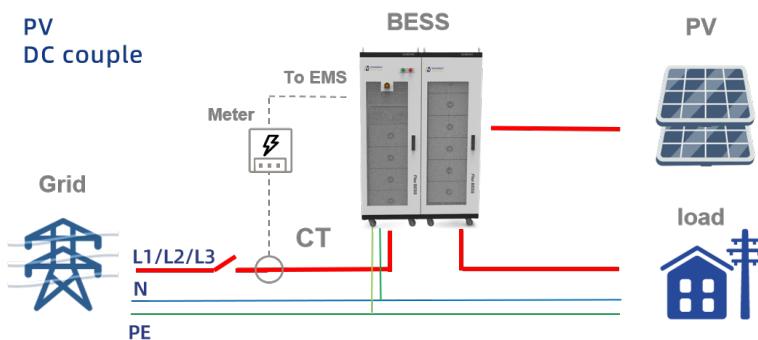
Flex BESS C&I Energy Storage System

NEW



■ Introduction

The R19 Series is an energy storage system specifically developed for **indoor applications**. With a height of 1.95 meters, it can fit into most buildings. Its highly integrated and plug-and-play design eliminates the need for complex installations of multiple battery packs. The innovative 19-inch standard rack design supports various power and capacity configurations, covering a wide range of commercial applications and providing a cost-effective solution for battery energy storage.



■ Application

- Back up power for frequent mains outages
- PV Self-consumption
- Peak shaving
- Power expansion
- On-Off grid

■ COST-EFFECTIVENESS

- Leverage the operating environment of the building, and extremely simplify the design to reduce costs
- Fully integrated for plug and play on site
- Fan cooling pack facilitates maintenance

■ SAFE AND RELIABLE

- The **Solid-insulated pack** provides strong electrical safety
- PACK, RACK, PCS three-level overcurrent protection
- **Dual auxiliary powers** provide a black start

■ FLEXIBLE

- A standardized basic platform facilitates the combination of different battery capacities and output powers
- Multiple functional units such as MPPT and ATS meet different needs
- Support a maximum expansion to 241kWh (off-grid).

■ SMART AND ROBUST

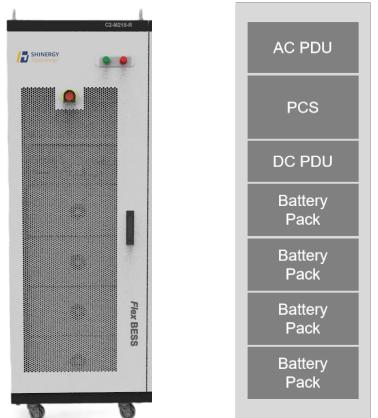
- Deep, thorough insights into battery, grid, and system data facilitate alarm management and maintenance
- Near-distal intelligent wireless operation and one-key remote upgrade, to provide boundless service

Technical data	R19-3XXX	R19-6XXX	R19-AXXX
DC side			
Cell type		LFP 3.2 V / 314 Ah	
System battery configurations	1P96S--1P216S		1P240S
Nominal capacity	96kWh--217kWh		241kWh
Nominal voltage range	1P96S: 268.8V--307.2V-350.4V 1P216S : 604.8V--691.2V--788.4V		672 V ~768V ~ 876 V
AC side (on-grid)			
Nominal power	30 kW	60kW	100kW
Nominal voltage		400 V 3P+N+PE	
Voltage range		340 V ~ 440 V	
Nominal frequency		50 Hz / 60 Hz	
Frequency range		45 Hz ~ 55 Hz / 55 Hz ~ 65 Hz	
Max.THD of current		< 3 % (Nominal power)	
Power factor range		1.0 leading ~ 1.0 lagging	
AC side (off-grid) *			
Nominal voltage		400 V	
Nominal frequency		50 Hz / 60 Hz	
Max.THD of voltage		< 3 % (Linear load)	
Unbalance load capacity		100 %	
PV side			
Max Power	19.2kW+19.2kW	38.4kW+38.4kW	50kW+50kW (option)
PV Max voltage		850V	900V
start Voltage		250V	0V
MPPT voltage range		200V-800V	0V--900V
Max current	32A+32A	64A+64A	160A+160A
System parameter			
cabinets configurations	1--3		2-3
Dimensions (W * H * D)		single cabinet : 650 mm * 1950 mm * 1100 mm	
Weight		1200kg (6 battery packs)	
System efficiency (charge or discharge)		95.4%	95.7%
PCS efficiency		97.8%	98.2%
Degree of protection		IP54	
Auxiliary power supply		Internal DC and External AC	
Anti-corrosion degree		C3 (Default)	
Operation humidity range		0 % ~ 100 %	
Operation temperature range		-30 °C ~ 50 °C (> 45 °C derating)	
Max. operating altitude		3000 m	
Temperature control method		Force air cooling	
Noise		≤ 70 dB (A) @ 1m	
Fire suppression system		Smoke detector, Heat detector, Alarm sounder	
Communication interface		Ethernet	
Communication protocol		Modbus TCP	
Standard		IEC 62619, IEC 62477, IEC 61000, UN 38.3	
Max.Parallel quantity (off-grid)		10	

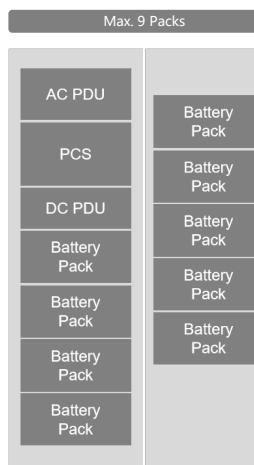
* The transformer cabinet is needed additionally when the system is in off-grid mode.

■ configurations

R19-3XXX



Max. 4Packs



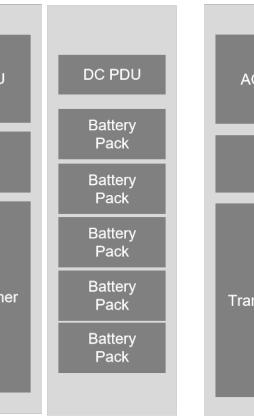
Max. 9 Packs

- Max power up to 30kW
- MPPT and STS integrated
- A single cabinet can support 4 packs, with a minimum system capacity of up to 96.5kWh
- Different pack configurations are supported, ranging from 96.5kWh to 217kWh with 2 cabinets
- The AC-PDU (AC Power Distribution Unit) is configured with an ATS inside

R19-6XXX



Max. 4 Packs System



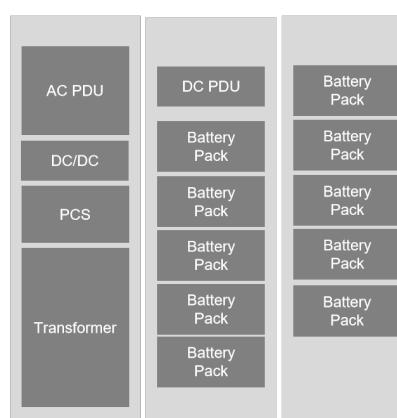
Max.9 Packs System

- Maximum power up to 60kW
- MPPT and STS are integrated
- 2 cabinets as one minimum system
- Ranging from 96.5kWh to 217kWh with 3 cabinets
- The AC-PDU is configured with an ATS inside
- Transformer is optional and integrated.

R19-AXXX



10 Packs System



- Maximum power up to 100kW
- MPPT and transformer are optional
- 3 cabinets as one minimum system
- The AC-PDU is configured with an ATS inside, used for on-grid and off-grid (applications)
- Transformer is optional and integrated.

System output Power(kW)		30	
PCS Power (kW)		30	
PV Power (kW)		19.2+19.2	
On-grid	V		V
On-off grid with ATS	V		V
Option Battery Capacity (kWh)			
battery packs configurations in system	4 Packs	96.5	96.5
	5 Packs	X	120.6
	6 Packs	X	144.7
	7 Packs	X	168.8
	8 Packs	X	192.9
	9 Packs	X	217.0
cabinets configurations			
Type	R19-3XXXX (with ATS) 96.5kWh with ATS : R19-3096		

System output Power(kW)		60		100
PCS Power (kW)		60		100
PV Power (kW)		38.4+38.4		50+50
On-grid	V	V		V
On-off grid with ATS	V	V		V
On-Off grid with transformer	V	V		V
Option Battery Capacity (kWh)				
battery packs configurations in system	4 Packs	96.5	96.5	X
	5 Packs	120.6	120.6	X
	6 Packs	X	144.7	X
	7 Packs	X	168.8	X
	8 Packs	X	192.9	X
	9 Packs	X	217.0	X
	10 Packs	X	X	241.2
cabinets configurations				
Type	R19-6XXXX (with ATS) T (with transformer) for 60kW system, R19-AXXXXAT for 100kW 96.5kW with ATS and Transformer : R19-6096AT			