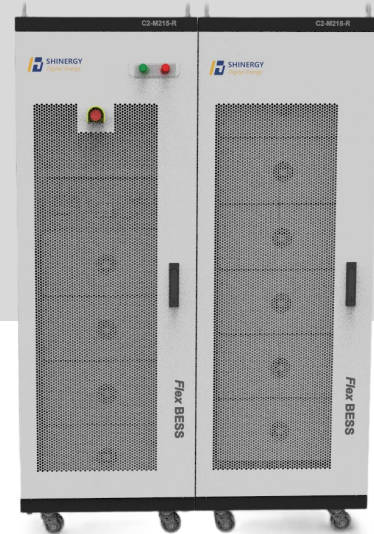


R19 Series

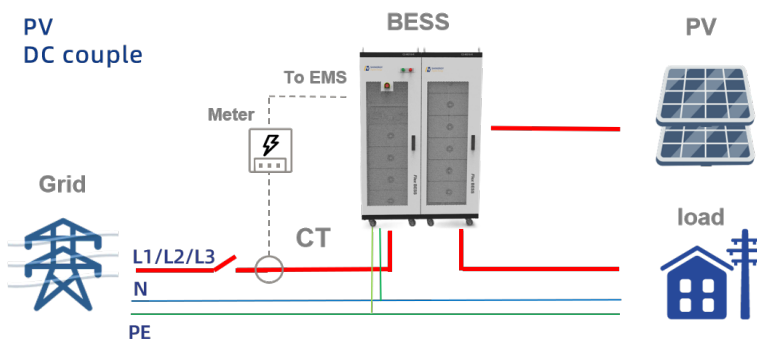
Flex BESS C&I Energy Storage System

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

■ 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).

■ 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

■ SMART AND ROBUST

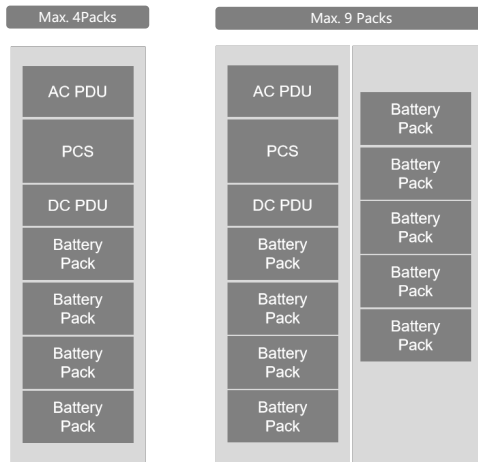
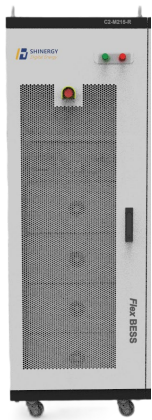
- Deep, thorough insights into battery, grid, and system data facilitate alarm management and maintenance
- Near-distal intelligent wireless operation and one-key remote upgrade, to provide boundless service

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.

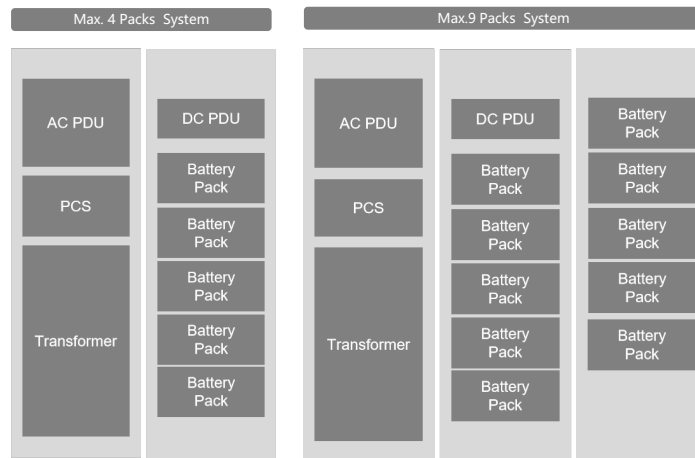
■ configurations

R19-3XXX



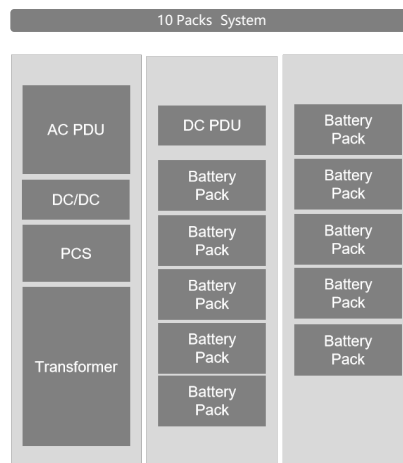
- Max power up to 30kW
- MPPT and STS integrated
- A single cabinet can support 4 packs, with a minimum system capacity of up to 96.5kWh
- Different pack configurations are supported, ranging from 96.5kWh to 217kWh with 2 cabinets
- The AC-PDU (AC Power Distribution Unit) is configured with an ATS inside

R19-6XXX





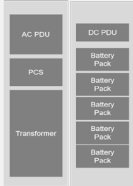
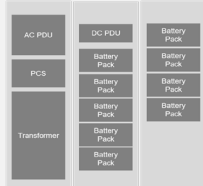
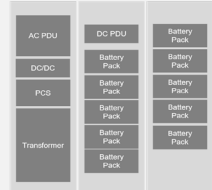
- Maximum power up to 60kW
- MPPT and STS are integrated
- 2 cabinets as one minimum system
- Ranging from 96.5kWh to 217kWh with 3 cabinets
- The AC-PDU is configured with an ATS inside
- Transformer is optional and integrated.

R19-AXXX



- 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		R19-3XXXA (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		R19-6XXXA(with ATS) T(with transformer) for 60kW system, R19-AXXXAT for 100kW 96.5kW with ATS and Transformer :R19-6096AT		