

# HRESYS 128V 12.8 kWh Battery Energy Storage System

HRESYS 128V BESS is designed based on HRESYS standard battery modules and BMS. The BESS is compact and flexible and is designed to meet power requirements on both - voltage and capacity. The system capacity can range from tens of kWh's to hundreds of kWh's.

The system is of small footprint and of modular design allowing easy capacity expansion according to demand. It's suitable for: government, energy, education, finance, communications, transport, agriculture and other industries.

### **Functions and Features:**

- Easy installation due to modular structure.
- Standard Design.
- Long service life.
- Small footprint.
- Uninterrupted power supply.
- Scalability: easy to expand capacity.







## **System Specifications:**



Category	Item	Parameter	Note
Rack Battery System	System Capacity	12.8KWh	
	Nominal DC Voltage	128V	
	DC Voltage Range	106.8V ~ 144V	
	Grouping Method	1P4S	1 string, 4 modules in series
	Charge Temperature Discharge Temperature	0~60°C	
		-20~60°C	
	Charge and Discharge Humidity	RH ≤ 80%	
	Storage Temperature	0~45°C	
	Communication	RS485/CAN/ Ethernet	
	Dimension (W—D—H)	600×600×1750mm	
	Weight of Rack	79 (±2) kg	
	High voltage box	160A	
Module VHR CES32280LFP	Nominal Capacity	100Ah	Standard discharge capacity after standard charge
	Nominal Voltage	32.0V	Configuration : 10S1P - VHR 27173204LFP-100Ah. Voltage of single cell is 3.2V
	Charge Voltage	36.0V	@ 25 ± 3°C
	Voltage at End of Discharge	26.7V	@ 25 ± 3°C
	Charge Voltage-cell	3.80V/cell	
	Maximum Continuous Discharge Current	100A	@ 25 ± 3°C
	Voltage at End of Discharge-cell	2.50V/cell	
	Operation Allowable Temperature Range	Charge: 0~60°C Discharge: -20~60°C	
	Self-discharge Rate/Month	≤ 4%	@ 25 ± 3°C, 50%SOC
	Cycle Life(cycles)	≥ 5000	@ 25 ± 3°C, 0.2 C / 0.5 C @80%DOD
	Operation Allowable Humidity Range	≤ 95% RH	Operation
		≤ 85% RH	Storage
	Recommended Storage temperature	0~40°C	Max. 6 month
	Dimension(W—D—H)	442×496×230mm	
	Weight	35(±2)kg	



# HRESYS 128V 35.8 kWh Battery Energy Storage System

HRESYS 128V BESS is designed based on HRESYS standard battery modules and BMS. The BESS is compact and flexible and is designed to meet power requirements on both - voltage and capacity. The system capacity can range from tens of kWh's to hundreds of kWh's.

The system is of small footprint and of modular design allowing easy capacity expansion according to demand. It's suitable for: government, energy, education, finance, communications, transport, agriculture and other industries.

### **Functions and Features:**

- Easy installation due to modular structure.
- Standard Design.
- Long service life.
- Small footprint.
- Uninterrupted power supply.
- Scalability: easy to expand capacity.







## **System Specifications:**



Category	Item	Parameter	Note
Rack Battery System	System Capacity	35.8KWh	
	Nominal DC Voltage	128V	
	DC Voltage Range	106.8V ~ 144V	
	Grouping Method	1P4S	1 string, 4 modules in series
	Charge Temperature Discharge Temperature	0~60°C	
		-20~60°C	
	Charge and Discharge Humidity	RH ≤ 80%	
	Storage Temperature	0~45°C	
	Communication	RS485/CAN	
	Dimension (W—D—H)	600×600×1825mm	
	Weight of Rack	375kg	
	High voltage box	400A	
Module VHR CES32280LFP	Nominal Capacity	280Ah	Standard discharge capacity after standard charge
	Nominal Voltage	32.0V	Configuration: 10S1P - VHR 27173204LFP-100Ah. Voltage of single cell is 3.2V
	Charge Voltage	36.0V	@ 25 ± 3°C
	Voltage at End of Discharge	26.7V	@ 25 ± 3°C
	Charge Voltage-cell	3.80V/cell	
	Maximum Continuous Discharge Current	280A	@ 25 ± 3°C
	Voltage at End of Discharge-cell	2.50V/cell	
	Operation Allowable Temperature Range	Charge: 0~60°C	
	Self-discharge Rate/Month	Discharge: -20~60°C	@ 25 ± 3°C, 50%SOC
	Cycle Life(cycles)	≥ 5000	@ 25 ± 3°C, 0.2 C / 0.5 C @80%DOD
	Operation Allowable Humidity Range	≤ 95% RH	Operation
		≤ 85% RH	Storage
	Recommended Storage temperature	0~40°C	Max. 6 month
	Dimension(W—D—H)	443—544—225mm	
	Weight	69(±2)kg	