APEX SOLAR

20.48~61.44kWh
Lithium-ion Battery ESS



PRODUCT FEATURES

>6000
Cycle Life@25°C

Multiple Safety Protection
Relay, Fuse, DC Breaker

Smart BMS
Intelligent management & maintenance of battery systems

Series
Adapting to up tp 12 series connection

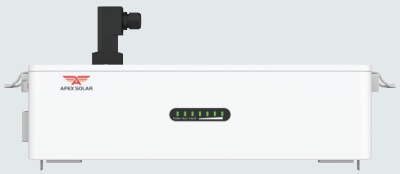
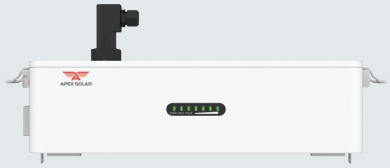
Voltage Wake-up
Under off-grid System Environment

New&Old Batteries can be used in together
Connect in Parallel

Remote Monitoring
Real time monitoring of electricity usage and equipment operation

Voltage Balancing
Voltage Balancing between Battery Cells&Battery Pack

Technical Specifications

Product Image		
Model	**Master**	**Slave**
Nominal Voltage	51.2Vdc	
Nominal Capacity	100Ah	
Rated Vlotage Range*	48-56V	
Max Operating Voltage Range	41.6-57.6V	
Max Charge Voltage	57.6Vdc	
Nominal Energy	5.12kWh	
Usable Energy	4.6kWh	
Max Continuous Charge Current	50A	
Max Pulse Charge Current	100A(3S)	
Max Continuous Discharge Current	50A	
Max Pulse Discharge Current	100A(3S)	
Self-discharge Rate	≤1%/week@35℃	
Internal Resistance	≤15mΩ	
Weight	≤58kg	≤56kg
Dimension (W*D*H)	620*170*400mm （Excluding handle）	
Operating Temperature	Charge:0℃~55℃ /Discharge: -10℃~55℃	
Operating Relative Humidity	5%~95%（No condensation）	
Optimal Storage Temperature	10~35℃	
Cooling Method	Natural Cooling	
IP Rate	IP65	
Communication	CAN/RS485	
Supported Series Quantity	1S	≤15S
Fire Protection	Built-in aerosol	

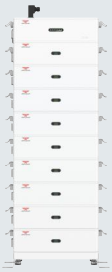
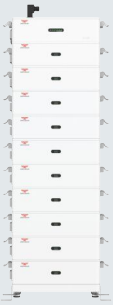
Testing conditions based on temperature 25℃ at the beginning of life.
*Total Energy/Usable Energy measured under specific conditions from Apex 0.2C CC-CV and based on recommended DOD(93%);

Technical Specifications

Product Image					
Model	20.48kWh	25.6kWh	30.72kWh	35.84kWh	40.96kWh
Nominal Voltage	204.8Vdc	256Vdc	307.2Vdc	358.4Vdc	409.6Vdc
Nominal Capacity	100Ah				
Rated Vlotage Range*	192-224Vdc	240-280Vdc	288-336V	336-392Vdc	384-448Vdc
Max Operating Voltage Range	166.4-230.4Vdc	208-288Vdc	249.6-345.6V	291.2-403.2Vdc	332.8-460.8Vdc
Max Charge Voltage	230.4Vdc	288Vdc	345.6Vdc	403.2Vdc	460.8Vdc
Nominal Energy	20.48kWh	25.6kWh	30.72kWh	35.84kWh	40.96kWh
Usable Energy	18.4kWh	23kWh	27.6kWh	32.2kWh	36.8kWh
Max Continuous Charge Current	50A				
Max Pulse Charge Current	100A(3S)				
Max Continuous Discharge Current	50A				
Max Pulse Discharge Current	100A(3S)				
Self-discharge Rate	≤1%/week@35℃				
Internal Resistance	≤15mΩ				
Weight (including base)	≤240kg	≤296kg	≤352kg	≤408kg	≤464kg
Dimension （W*D*H)	620*700*400mm	620*840*400mm	620*1010*400mm	620*1180*400mm	620*1350*400mm
Operating Temperature	Charge:0℃~55℃ /Discharge: -10℃~55℃				
Operating Relative Humidity	5%~95% （No condensation)				
Optimal Storage Temperature	10~35℃				
Cooling Method	Natural Cooling				
IP Rate	IP65				
Supported Series Quantity	4S	5S	6S	7S	8S
Communication	CAN/RS485				
Fire Protection	Built-in aerosol				

Testing conditions based on temperature 25℃ at the beginning of life.
*Total Energy/Usable Energy measured under specific conditions from Apex 0.2C CC-CV and based on recommended DOD(93%);

Technical Specifications

Product Image				
Model	46.08kWh	51.2kWh	56.32kWh	61.44kWh
Nominal Voltage	460.8Vdc	512Vdc	563.2Vdc	614.4Vdc
Nominal Capacity	100Ah			
Rated Vlotage Range*	432-504Vdc	480-560Vdc	528-616V	576-672Vdc
Max Operating Voltage Range	374.4-518.4Vdc	416-576Vdc	457.6-633.6V	499.2-691.2Vdc
Max Charge Voltage	518.4Vdc	576Vdc	633.6Vdc	691.2Vdc
Nominal Energy	46.08kWh	51.2kWh	56.32kWh	61.44kWh
Usable Energy	41.4kWh	46kWh	50.6kWh	55.2kWh
Max Continuous Charge Current	50A			
Max Pulse Charge Current	100A(3S)			
Max Continuous Discharge Current	50A			
Max Pulse Discharge Current	100A(3S)			
Self-discharge Rate	≤1%/week@35℃			
Internal Resistance	≤15mΩ			
Weight (including base)	≤520kg	≤576kg	≤632kg	≤688kg
Dimension （W*D*H)	620*1520*400mm	620*1690*400mm	620*1860*400mm	620*2030*400mm
Operating Temperature	Charge:0℃~55℃ /Discharge: -10℃~55℃			
Operating Relative Humidity	5%~95%（No condensation)			
Optimal Storage Temperature	10~35℃			
Cooling Method	Natural Cooling			
IP Rate	IP65			
Supported Series Quantity	9S	10S	11S	12S
Communication	CAN/RS485			
Fire Protection	Built-in aerosol			

Testing conditions based on temperature 25℃ at the beginning of life.
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