

High Voltage Lithium-Ion Phosphate Battery storage system

Battery Module : RT-5K



Module	RT-5K
Basic Parameters	
Capacity(kWh)	5.12
Nominal Voltage(Vdc)	51.2
Nominal Capacity(AH)	100
Voltage Range(Vdc)	44.8~56.8
Depth of Discharge	90%
Dimension(W* D* H,mm)	520*500*140
Design Life	15+ years (25°C)
Cycle Life	> 6000 (25°C)
Communication	CANBUS/Modbus RTU/TCP/IP
Protection Class	IP20
Weight(kg)	45
Operation Temperature	-10~55°C
Storage Temperature	0~35°C
Product Certificate	UN38.3

Main Controller : RT-HV100H



Basic Parameters

Related Product	1000V120A
AC Supply	—
System Operation Voltage (Vdc)	0~1000
Operation Current (Max.) (A)	120
Self-consumption Power(W)	8
Dimension (W* D* H, mm)	520*542*140
Communication	MODBUS RTU/CAN
Protection Class	IP20
Weight(kg)	19.5
Operation Life	15+
Operation Temperature	-20~65
Storage Temperature	-40~80

BMS Function

Protection and Alarm

- Charge/Discharge End
- Charge Over Voltage
- Charge/Discharge Over Current
- High/Low Temperature
- Operation Record
- Administrator Monitor: Current, Voltage, Temperature, SOC&SOH.

Management and Monitor

- Cells Balance
- Intelligent Charge Model
- Capacity Retention Calculate
- Isolation and Protection
- Alarm and Protection

Powercube RT60K-100 System Volage < 1000V



Technical Data

Technical specification	15KWH	20KWH	25KWH	30KWH	35KWH	40KWH	45KWH	50KWH	55KWH	60KWH
Installation Mode	Racked									
Battery Type	LifePO4(LFP)									
Module Energy (KWh)	5.12									
Module Nominal Voltage (V)	51.2									
Module Capacity (Ah)	100									
System Model	RT15-100	RT20-100	RT25-100	RT30-100	RT35-100	RT40-100	RT45-100	RT50-100	RT55-100	RT60-100
Battery Module Qty InSeries (Optional)	3	4	5	6	7	8	9	10	11	12
System Nominal Voltage (V)	153.6	204.8	256.0	307.2	358.4	409.6	460.8	512.0	563.2	614.4
System Operating Voltage (V)	139.2~170.4	185.6~227.2	232.0~284.0	278.4~340.8	324.8~397.6	371.2~454.4	417.6~511.2	464.0~568.0	510.4~624.8	556.8~681.6
System Nominal Capacity (KWh)	15.36	20.48	25.60	30.72	35.84	40.96	46.08	51.20	56.32	61.44
Usable Capacity (KWh)	12.29	16.38	20.48	24.58	28.67	32.77	36.86	40.96	45.06	49.15
Dimension (mm)	580*584.5*1578						580*584.5*2162			
Weight (Kg)	207.6	253.1	298.6	344.1	389.6	435.1	496.0	541.5	587.0	632.5
Recommend Charge/Discharge Current (A)	50									
Communication	CAN									
Ingress Protection	IP20									
Altitude	≤2000m									
Cycle Life	25±2°C,0.5C/0.5C,EOL70%≥6000									
Monitoring Parameters	System voltage,Current,cell voltage,cell temperature,module temperature									
SOC	Intelligent algorithm									
Working Temperature	0°C~45°C Charge -10°C ~50°C Discharge									
Storage Temperature	0~35°C									

1. DC Usable Energy, test conditions: 80% DOD, 0.2C charge & discharge at 25°C. System usable energy may vary due to system configuration parameters.
2. The current is affected by temperature and SOC.
3. The warranty is due whichever reached first of warranty period or life cycle power.