VCHB-241K-314

High-Voltage Lithium Battery



Product Highlights

Flexible High-Voltage Scaling

Scalable from 3 to 15 modules (48 to 241 kWh) in series. Powered by a heavy-duty 1000V/250A master controller to minimize line loss and optimize efficiency

15+ Years Life & 6000+ Cycles

Engineered for long-term ROI with an exceptional 15+ year design life and ≥ 6000 cycles, ensuring minimal degradation in heavy applications

Smart BMS & Total Safety

Intelligent BMS features active cell balancing, precise SOC/SOH tracking, and millisecond-level protection against over-voltage, over-current, and temperature extremes

Seamless Smart Integration

Fully compatible with CANBUS, Modbus RTU, and TCP/IP protocols, enabling plug-and-play connection to EMS and third-party platforms for effortless remote digital O&M

Model	VCHB-241K-314												
Technical Specification	48kWh	64kWh	80kWh	96kWh	112kWh	128kWh	144kWh	160kWh	176kWh	192kWh	208kWh	225kWh	241kWh
Installation Mode	Racked												
Battery Type	LifePO4 (LFP)												
Module Energy (wh)	16076												
Module Nominal Voltage (V)	51.2												
Module Capacity (Ah)	314												
System Module	48kWh	64kWh	80kWh	96kWh	112kWh	128kWh	144kWh	160kWh	176kWh	192kWh	208kWh	225kWh	241kWh
Nominal Voltage(V)	DC 153.6V	DC 204.8V	DC 256V	DC 307.2V	DC 358.4V	DC 409.6V	DC 460.8V	DC 512V	DC 563.2V	DC 614.4V	DC 665.6V	DC 716.8V	DC 768V
Working Voltage(V)	DC139.2V ~172.8V	DC185.6V ~230.4V	DC232.0V~ 288.0V	DC278.4V ~345.6V	DC324.8V ~403.2V	DC371.2V ~460.8V	DC417.6V ~518.4V	DC 464.0V ~576.0V	DC510.4V ~633.6V	DC556.8V ~691.2V	DC 603.2V ~748.8V	DC 649.6V ~806.4V	DC 696.0V ~864.0V
Nominal Capacity (Ah)	314	314	314	314	314	314	314	314	314	314	314	314	314
Rated Energy (Wh)	48230	64307	80384	96460	112537	128614	144691	160768	176844	192921	208998	225075	241152
Dimension(mm)	547×799×1199	547×799×1463	547×799×1727	1054×799×1199		1054×799×1463		1054×799×1727		1054×799×1991		1054×799×2255	
Weight(Kg)	471.2	603.2	735.2	898.2	1019.2	1167.2	1288.2	1436.2	1557.2	1705.2	1826.2	1974.2	2095.2
Battery Module Qty In Series (Optional)	3	4	5	6	7	8	9	10	11	12	13	14	15
Recommend Charge/ Discharge Current (A)	157												
Communication	CAN												
Ingress Protection	IP20												
Altitude(m)	≤2000												
Cycle Life	25±2℃, 0.5C/0.5C, EOL70% ≥6000 times												
Monitoring Parameters	System voltage, Current, Cell voltage, Cell temperature, Module temperature												
SOC	Intelligent algorithm												
Working Temperature(℃)	Charge: 0~55℃, Discharge: -20~55℃												
Storage Temperture(℃)	0~35℃												