

Quark-B417-L

Outdoor Cabinet Liquid-cooled Battery System

Quark-B417-L is a new outdoor cabinet liquid-cooled battery system developed by LEOCH. The system adopts modular design and integrates battery energy storage units, BMS, temperature control system and fire protection system and other equipment. As a DC side product, Quark-B417-L features efficient thermal management, multiple safety designs, compact structure (small footprint), and convenient transportation, installation, and maintenance. Equipped with external communication interfaces, it can connect external PCS and EMS. This product is widely used in industrial, commercial, and large-scale energy storage scenarios, such as peak shaving and valley filling, photovoltaic energy storage, peak shaving and frequency regulation, microgrids, and emergency backup power applications.



*The appearance of the product is for reference

Complete certification



System: IEC61000, IEC62619, UL9540A, UN38.3
Cluster: UL1973



Safe And Reliable

Multiple fire protection design, cell level temperature detection + cabinet level aerosol fire extinguishing + explosion-proof pressure



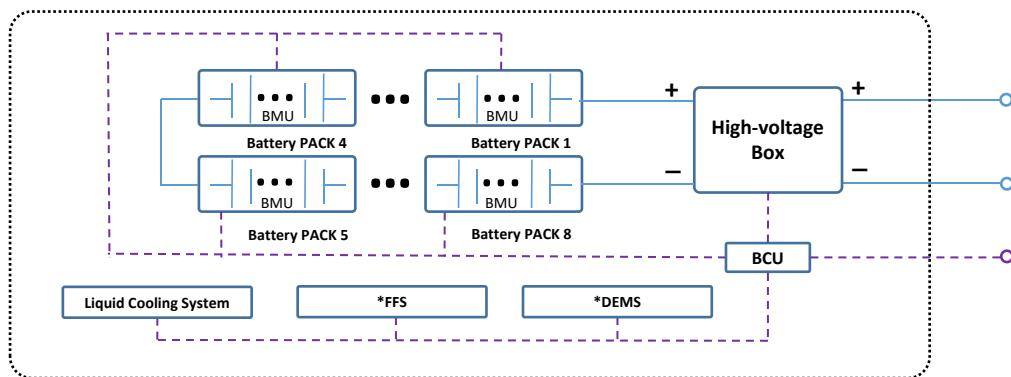
Flexible Configuration

Modular design, flexible expansion, multi machine parallel design, supporting rapid expansion to megawatt level DC systems



Extreme Temperature Control

Precise liquid cooling temperature control, system temperature difference $\leq 3\pm1.5$ °C. The system has higher efficiency and longer service life.



..... Leoch Equipment

..... Communication Line

..... DC Power Line

*DEMS: Dynamic Environment Monitoring System; *FFS: Fire Fighting System

Outdoor Cabinet Liquid-cooled PV Energy Storage System



System model		Quark-B417-L
Battery Parameters		
Cell Type		LFP3.2V/314Ah
Battery PACK Type		1P52S
Cluster Configuration		1P416S
Nominal Energy		417.99kWh
Nominal Voltage Range		1331.2V
Battery Voltage Range		1164.8V~1476.8V
System Parameters		
Dimensions (W*D*H)		1350*1350*2400 (mm)
Weight		About 3900kg
IP Level		IP55
Corrosion protection Level		C3
Altitude		2000 meters (>2000m derate for use)
Operating Temperature		-20°C~50°C
Relative Humidity		0~95% (no condensation)
Operating Noise		≤75dB
Balancing Mode		Passive Balancing
Cooling method		Intelligent liquid cooling
Fire Fighting System		Cabinet level aerosol fire extinguishing + explosion- proof pressure relief
Communication Interface		RS485, CAN, Ethernet
Certifications		System: IEC61000, IEC62619, IEC62477-1, UL9540A, UN38.3; Cluster: UL1973