



UNLEASHING SUSTAINABLE POWER


DATASHEET


MOAB-CORE

HIGH VOLTAGE LiFeP04 51.2V 14.3KWH

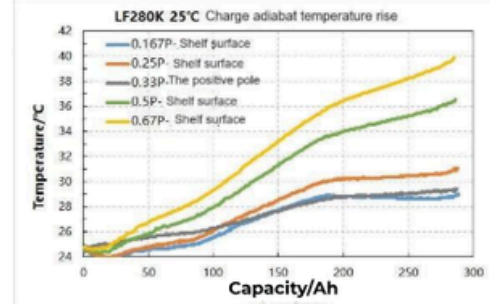
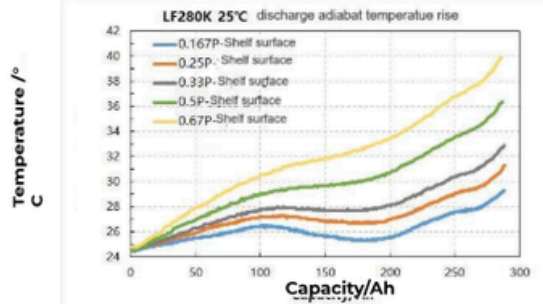
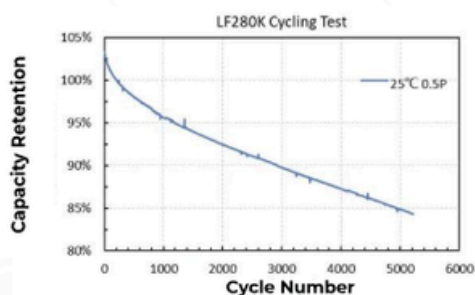



The **IonX** battery aims to provide reliable and efficient energy storage solutions designed for industrial, manufacturing, commercial, as well as agricultural applications. It integrates advanced innovative battery management systems to ensure optimal performance, safety, and longevity. Our batteries seek to be the best choice when aiming to capitalize with the benefits from energy arbitrage applications, when gearing up for power security and of course taking advantage of energy independence by enabling integration with renewable energy for off grid and self consumption solutions.


PRODUCT NAME		
Cell Type	Prismatic LiFePO4	
Rated Nominal Voltage	3.2V	
Rated Capacity	280Ah	
Resistance (1Khz)	$\leq 0.25\text{m}\Omega$	
Charge - Discharge Efficiency	$\geq 96\%$	
Storage & Operating Humidity Max	$\leq 80\%$	
Cycle Life	≥ 8000	
Operating Average Temperature	25°C	
Max Average DoD	80%	

BATTERY MODULE INFORMATION		
Nominal Voltage	51.2	
Capacity Ah	280	
Capacity kWh	14.34	
Battery Connection Formation	16S1P	
Standard Charge/ Discharge Current	0.5C/0.5C	
Max Charge Cut-off Voltage	58.4	
Min Discharge Cut-off Voltage	44	
Dimension (W*H*D) With Faceplate	400B/455F*240*766	
Dimension (W*H*D) Without Faceplate	400B/455F*240*720	
Weight	+/- 110kg	
Paint & Protection Certification	Anti Rust, Anti Corrosion Treatment comply with JB/T6886	
Min and Max Ambient Temperature	13°C \geq or \leq 30°C	
Operating Temperature Range	10°C ~ 40°C	
Cooling Type	Active Cooling	
Temperature Control Method	Internal Fan With Ventilated Cooling Duct	
Maximum Altitude	3000m Above Sea Level	

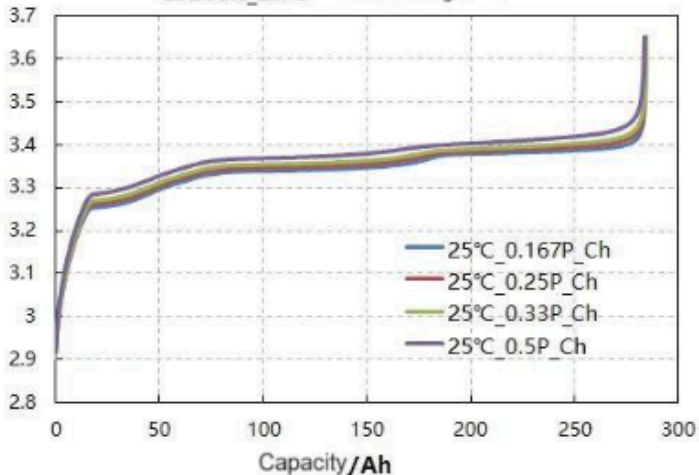
ELECTRICAL PERFORMANCE OF PRODUCT



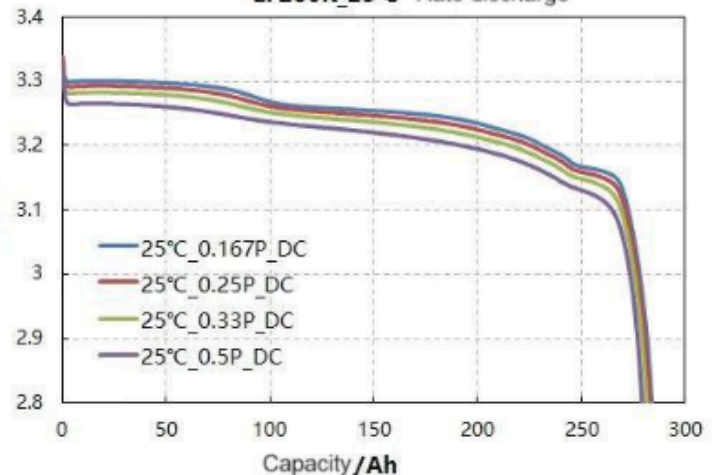
BATTERY MANAGEMENT		
Management Network Architecture	3Level	
Level 1: BMS Module Integrated Cell Management		
Rated Voltage Or Normal Operation	696~828Vdc	
Min & Max Operating Voltages	600~876Vdc	
Cluster Voltage Collection	Collection Range: 0~1500V	
	Collection Res: 0.1V	
	Accuracy:≤+-1%FS	
	≥1000V (≤0.5%FS)	
	Refresh Rate: 100ms	
	Elec Isolation: 4149Vdc/2934Vac(8mm)	

BATTERY MODULE INFORMATION		
Cluster Current Collection	Range: ±350A	
	Resolution: 0.1A	
	Accuracy: ±1200A	
	±1%FS	
Level 2: BMU Cluster Integrated With BMS Series		
HV Control Box	Safety Shut Off Switch CAN BUS Communication	
Level 3: SCU Control Unit		
Display	6" LED Touch Screen	
Secondary Indicators	LED(GRN, ORNG, RED)	
Connectivity	LAN, WiFi, GSM, Bluetooth,	
OS	Android	
IP Rating	20	

LF280K_25°C Rate charge



LF280K_25°C Rate discharge



PRODUCT RANGE	MOAB CORE	MOAB CORE	MOAB CORE	MOAB CORE	MOAB CORE
Cluster Size	114	143	172	200	215
No. Modules	8	9	12	14	15
Rated Capacity kWh	114.6	143	172	200	215
Usable Capacity @ 80% DoD (kWh)	91.75	114.4	138	160	172
Rated Nominal Voltage (Vdc)	409	512	614	717	768
Max Charge Voltage (Vdc)	467	584	701	818	876
Min Discharge Voltage (Vdc)	352	440	528	616	660
Tower Racking Configuration	8 x 2	8 Tier x 2	8 Tier x 2	8 Tier x 2	8 Tier x 2
Cycle Life	≥ 8000				
Max Average DoD	80%				
Standard Ave Discharge/Charge Amps	0.5C/0.5C				
Max Discharge/Charge Amps	1C/1C				
Operating Average Temperature	25°C				
Max Average DoD	80%				
Per Cluster HV Control Unit Incl	Yes				
External SCU Management Incl	Yes				
Storage & Operating Humidity Max	≥ 80%				
Warrantee	10yr/8000cyc*				

READ WARRANTY DOCUMENT

SAFETY AND RELIABLE CONVENIENT O&M

