



Advanced LiFePO₄ Battery Module

RBmax5.1L

Long-Lasting with over
6,000 Cycle Life

5.12 kWh ~ 40.96 kWh
Flexible Capacity Options

 **Excellent Safety** of
Cobalt-Free LiFePO₄ Battery

 **CE, UL, FCC, IEC62619**
Certifications

 **Easy Installation**
with Modular and Stacked Design

 **IP65 Rating**
Strong Environment Adaptability



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Technical Specifications

Model	RBmax5.1L	2*RBmax5.1L	3*RBmax5.1L	4*RBmax5.1L	
Electric Data					
Nominal energy (kWh)	5.12	10.24	15.36	20.48	
Usable energy (kWh)	4.79	9.58	14.37	19.16	
Max. continuous charge current (A)	50	100	100	100	
Max. continuous discharge current (A)	100	100	100	100	
Cell type	Lithium iron phosphate (LFP)	Nominal voltage (V)	51.2	Operating voltage range (V)	44.8 ~ 56.8
General Data					
Weight (Kg)	50.5	94.1	145.5	193	
Dimensions (W × D × H, mm)	650 x 240 x 460	650 x 240 x 790	650 x 240 x 1120	650 x 240 x 1450	
Operating temperature (°C) ^[2]	Charge: 0 ~ 55, discharge: -20 ~ 55				
Storage temperature (°C)	≤1 month: -20 ~ 45, >1 month: 0 ~ 35				
Installation location	Indoor / outdoor, floor standing, wall mounted				
Communication	CAN, RS485				
Relative humidity	5 ~ 90%				
Max. altitude (m)	4000 (>2000 derating)				
Ingress rating	IP 65				
Certification					
Safety	IEC 62619, UL 1973				
EMC	EN 61000-6-1, EN 61000-6-3				
Transportation	UN38.3				

Model	RBmax5.1L2	2*RBmax5.1L2	3*RBmax5.1L2	4*RBmax5.1L2	5*RBmax5.1L2	5*RBmax5.1L
Electric Data						
Nominal energy (kWh)	5.12	10.24	15.36	20.48	25.6	25.6
Usable energy (kWh)	4.79	9.58	14.37	19.16	23.95	23.95
Max. continuous charge current (A)	50	100	100	100	100	100
Max. continuous discharge current (A)	200	200	200	200	200	100
Cell type	Lithium iron phosphate (LFP)	Nominal voltage (V)		51.2	Operating voltage range (V) 44.8 ~ 56.8	
General Data						
Weight (Kg)	47.5	92.1	136.7	181.3	228.8	228.8
Dimensions (W × D × H, mm)	650 × 240 × 460	650 × 240 × 790	650 × 240 × 1120	650 × 240 × 1450	650 × 240 × 790 + 650 × 240 × 1120	650 × 240 × 790 + 650 × 240 × 1120
Operating temperature (°C) ^[2]		Charge: 32 ~ 131°F (0 ~ 55°C), Discharge: 4 ~ 131°F (-20 ~ 55°C)				
Storage temperature (°C)		≤1 month: -20 to 45°C (-4 to 113°F), >1 month: 0 to 35°C (32 to 95°F)				
Installation location		Indoor/Outdoor, Floor standing or Wall mounted				
Depth of discharge:		92%				
Communication		CAN, RS485				
Relative humidity		0 ~ 95%				
Max. altitude (m)		4000 (>2000 derating)				
Ingress rating		IP 65				
Certification		IEC 62619, UL 1973, EN 61000-6-1, EN 61000-6-3, FCC Part 15, UN38.3				

[1] When the ambient temperature is too low or too high, the performance of battery may be limited.

[2] All pictures shown are for reference only and data are based on ROYPOW standard test procedures. Actual performance may vary according to local conditions. Only authorized personnel are allowed to operate or make adjustments to the batteries. We reserve the right to make revisions as well as product alterations and improvements at any time without prior notice.