

VRB™ Battery System Specifications

Note: Battery System performance specifications are based on preliminary testing; actual measured values may vary.

Performance Characteristics		
Open circuit voltage at 0% and 100% capacity	50 VDC to 56 VDC	
Maximum charge voltage (at battery terminals)	58.9 VDC	
Minimum voltage on discharge	42 VDC	
Maximum charge current	140 ADC	
Maximum discharge current (continuous)	140 ADC	
Maximum discharge current (< 300 s)	175 ADC	
Continuous power at beginning of discharge	7.0 kW	
Continuous power at end of discharge	5.25 kW	
Duty cycle	100%	
Physical Specifications (Approximate)		
Dimensions (D x W x H) (power module only)	1.0 m x 1.2 m x 1.1 m	
Dimensions (D x W x H) (with 40 kWh storage)	1.3 m x 1.15 m x 1.90 m	
Mass (power module)	510 kg	
Mass (power module plus 40 kWh storage)	5,300 kg	
Operating Limits		
Electrolyte Temperature range	10°C to 35°C	
Humidity	0% to 95%, non-condensing	
Altitude range (no derating)	0 m to 3,000 m	
Environmental Limits – Shipping and Storage (Class 2K3 in IEC 60721-3-2)		
Allowable temperature range	-25°C to 70°C	
Humidity	0% to 95%, non-condensing	
Altitude range	0 m to 3,000 m	
Reliability and Design Life		
Cycle life	> 10,000 cycles	
Service life	100,000 hours	
Maintenance Intervals	Frequency	Offline Duration
Maintenance interval “A”	9,000 hours	< 2 hours
Maintenance interval “B”	27,000 hours	< 8 hours
Service life	90,000 hours	N/A