quarelex

Lithium-ion(LiFePO4) E-Bike/E-Trike Power Battery

60V - 50Ah / 100Ah

KEY FEATURES

Nominal Voltage: 64V

Capacity: 50Ah, 100Ah, Customizable Dimensions: Standard or Customizable

IP Grade: IP65

Cell Chemistry: Lithium Iron Phosphate (LiFePO4) Monitoring: Bluetooth, LCD Screen(optional) Lifespan: >3500 cycles @80% DoD, 25°C(77°F), 0.5C



Specifications

Model	QM60-50	QM60-100	
Electrical			
Nominal Voltage	64 V		
Operation Voltage	50 - 73 V		
Rated Capacity	50 Ah	100 Ah	
Rated Energy	3.2 kWh	6.4 kWh	
Estimated Range Per 100% SOC	50-60 miles (80-95 km) @ 40km/h	100-120 miles (160-190 km) @ 40km/h	
Suggested DoD	< 90%		
Max DoD	100%		
Self-Discharge	< 3% per Month		
Cells Type	LiFeP04 Prismatic		
Cell Model	3.2 V 50 Ah	3.2 V 100 Ah	
Cells Configuration	20S1P	20S1P	
Balancing	400 mA, Active Balancing		
Charge			
Charge Voltage	72 V		
BMS Charge Voltage Cut-Off	72 V		
Recommended Charge Current	< 25 A	< 50 A	
Max. Continuous Charge Current	50 A	100 A	
Charge Temperature	0 - 55 °C (32 - 131 °F)		
Discharge			
Max. Continuous Discharge Current	60 A	100 A	
Peak Discharge Current	100 A @ 10S	200 A @ 10S	
Recommended Low Voltage Cut-Off	58 V		
BMS Discharge Voltage Cut-Off	50 V		
Discharge Temperature	-20 - 60 °C (-4 - 140 °F)		
Mechanical			
Dimensions	320 * 260 * 160 mm (12.6 * 10.24 * 6.3 inch)	560 * 240 * 180 mm (22.05 * 9.45 * 7.09 inch)	
Weight	31 kg (68.34 lbs)	56 kg (123.46 lbs)	
Terminal Type	Charge: C14 Inlet or Anderson, Discharge: Anderson		
Case Material	Powder Coated Steel		
Enclosure Protection	IP65		
Communication			
LCD Screen	Yes	Yes	
Bluetooth	Yes	Yes	
CAN	Yes	Yes	
Safety And Warranty			
Protection Function	Overcharge, Over-discharge, Over current, Short Circuit, Over Temperature, Under Temperature		
Storage	0 - 40 °C (32 - 104 °F), < RH 80%, > 60% SOC		
Warranty	2 Years		
Lifespan	10 years or 3500 Cycles @ 25°C, 80% EOL		
Certificates	CE, RoHS, UN38.3, IEC, MSDS		

^{1.} All specifications shown above are subject to change during products improving at any time without prior notice.

^{2.} For other batteries not listed above, customization is also available.

quarelex

Lithium-ion(LiFePO4) E-Bike/E-Trike Power Battery 72V - 50Ah / 100Ah

KEY FEATURES

Nominal Voltage: 76.8V

Capacity: 50Ah, 100Ah, Customizable Dimensions: Standard or Customizable

IP Grade: IP65

Cell Chemistry: Lithium Iron Phosphate (LiFePO4) Monitoring: Bluetooth, LCD Screen(optional) Lifespan: >3500 cycles @80% DoD, 25°C(77°F), 0.5C



Specifications

Model	QM72-50	QM72-100	
Electrical			
Nominal Voltage	76.8 V		
Operation Voltage	60 - 87.6 V		
Rated Capacity	50 Ah	100 Ah	
Rated Energy	3.84 kWh	7.68 kWh	
Estimated Range Per 100% SOC	65-75 miles (105-120 km) @ 50km/h	130-150 miles (210-240 km) @ 50km/h	
Suggested DoD	< 90%		
Max DoD	100%		
Self-Discharge	< 3% per Month		
Cells Type	LiFePO4 Prismatic		
Cell Model	3.2 V 50 Ah	3.2 V 100 Ah	
Cells Configuration	24S1P	24S1P	
Balancing	400 n	nA, Active Balancing	
Charge			
Charge Voltage	72 V		
BMS Charge Voltage Cut-Off		72 V	
Recommended Charge Current	< 25 A	< 50 A	
Max. Continuous Charge Current	50 A	100 A	
Charge Temperature	0 - 55 °C (32 - 131 °F)		
Discharge			
Max. Continuous Discharge Current	60 A	100 A	
Peak Discharge Current	100 A @ 10S	200 A @ 10S	
Recommended Low Voltage Cut-Off	69.6 V		
BMS Discharge Voltage Cut-Off		60 V	
Discharge Temperature	-20 - 60 °C (-4 - 140 °F)		
Mechanical			
Dimensions	460 * 230 * 160 mm (18.11 * 9.06 * 6.3 inch)	640 * 240 * 180 mm (25.2 * 9.45 * 7.09 inch)	
Weight	36 kg (79.37 lbs)	63 kg (138.89 lbs)	
Terminal Type	Charge: Anderson, Discharge: Anderson		
Case Material	Powder Coated Steel		
Enclosure Protection	IP65		
Communication			
LCD Screen	Yes	Yes	
Bluetooth	Yes	Yes	
CAN	Yes	Yes	
Safety And Warranty			
Protection Function	Overcharge, Over-discharge, Over current, Short Circuit, Over Temperature, Under Temperature		
Storage	0 - 40 °C (32 - 104 °F), < RH 80%, > 60% SOC		
Warranty	2 Years		
Lifespan	10 years or 3500 Cycles @ 25°C, 80% EOL		
Certificates	CE, RoHS, UN38.3, IEC, MSDS		

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