

MG LFP 24V Series

- Technical specifications -

MGLFP24x230 (LFP 230Ah)

MGLFP24x280 (LFP 280Ah)

MGLFP24x304 (LFP 304Ah)



Technical specifications

Technical specifications	MGLFP24x230 25.6 V / 230 Ah	MGLFP24x280 25.6 V / 280 Ah	MGLFP24x304 25.6 V / 304 Ah
Technology	Lithium-Ion next generation LiFePo4		
Cell configuration	8S1P		
Nominal voltage	25.6 V		
Nominal capacity	230 Ah	280 Ah	304 Ah
Nominal energy	5.8 kWh	7.2 kWh	7.8 kWh
Cycle Life DOD 80% ¹	> 3500	> 3500	> 4000
Specific energy ²	143 Wh/kg	136 Wh/kg	145 Wh/kg
Weight	41 kg	53 kg	54 kg
Discharge⁵			
Discharge cut-off voltage	24.0 V		
Recommended discharge current	< 115 A (< 0.5C)	< 140 A (< 0.5C)	< 152 A (< 0.5C)
Continuous discharge current	230 A (1.0 C)	280 A (1.0 C)	304 A (1.0 C)
Maximum discharge current ³	345 A (1.5 C)	420 A (1.5 C)	456 A (1.5 C)
Fuses ⁴	300A, fuse inside		
Charge⁵			
Charge voltage	28.2 V		
Recommended charge current	< 115 A (< 0.5C)	< 140 A (< 0.5C)	< 152 A (< 0.5C)
Continuous charge current	230 A (1.0 C)	280 A (1.0 C)	304 A (1.0 C)
Maximum charge current (10 s) ³	345 A (1.5 C)	280 A (1.0 C)	304 A (1.0 C)
Configuration			
Series configuration ⁷	Up to 6 modules	Up to 6 modules	Up to 6 modules
Parallel configuration	Up to 96 modules.		
Environmental			
Operating temperature charge	0 to +45°C		
Operating temperature discharge	-20 to +55°C		
Recommended operating temperature	20 to +30°C		
Recommended storage temperature	10 to +35°C		
Humidity (non-condensing)	≤ 95 %		
Mechanical			
Power connections	M8 stud, 20 Nm		
IP-Protection class	IP30		
Cooling	Air, convection		
Dimensions (l x h x w)	517 x 294 x 193 mm	652 x 294 x 193 mm	
Safety			
Battery Management System (BMS)	Integrated slave BMS		
Balancing	Passive		
Compatible BMS master controller	MG Master LV, MG Master HV		
Communication	CAN-Bus, RJ45 or M12 connection		
Standards			
EMC: Emission	EN-IEC 61000-6-3:2007/A1:2011/C11:2012		
EMC: Immunity	EN-IEC 61000-6-1:2007		
Low voltage directive	EN 60335-1:2012/AC:2014		
Approvals	IEC-EN62619, IEC-EN62620 (ES-TRIN ⁶)		

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Footnotes

¹ End-of-Life is 70% of initial capacity at 25 °C. Cycle life is depending on the battery temperature. Higher battery temperature will result in a lower number of cycles.

² Including BMS and enclosure.

³ Duration is depending on battery temperature.

⁴ Fuses can be replaced with non-fused battery poles for high power and high voltage applications. In this case each battery string needs to be fused elsewhere in the circuit.

⁵ Charge and discharge rates are depending on battery temperature and State-Of-Charge.

⁶ In progress for 230 Ah and 304 Ah module.

⁷ More than six in series on request.