Product Data Sheet

2026-01-16

MG LFP Battery 25.6V/304Ah/7800Wh (M12, HV)

MGLFP242304

Description

The MG LFP Battery 24 V 304 contains the third generation LiFePO4 chemistry forms the basis of this safe and reliable battery. This battery is fully scalable in both voltage and capacity. Easily expand your energy storage system (ESS) by connecting the LFP batteries in parallel and series. Connect up to 16 modules in series, to create a battery voltage of 470 Vdc. Adding more parallel strings increases the system capacity. As a result, you can reach system capacities of over 1 MWh.

Product downloads

https://downloads.mgenergysystems.eu/lfp24v

Specifications

Charge

Charge Voltage [1]	28.2 V
Continuous Charge Current [2]	304 A (1.0 C)
Maximum Charge Current (10 s)	304 A (1.0 C)
Maximum Charge Voltage	29.2 V
Recommended Charge Current	< 152 A (0.5 C)

Configuration

Parallel Configuration	Up to 96 modules
Series Configuration	Up to 16 modules

Discharge

Continuous Discharge Current [2]	304 A (1.0 C)
Discharge Cut-Off Voltage	24.0 V
Maximum Discharge Current [2]	456 A (1.5 C)
Recommended Discharge Current	< 152 A (0.5 C)

Environmental

Humidity (Non-Condensing)	≤ 95 %
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

Mechanical

Cooling	Air, Convection
Data Connection	CAN-Bus M12
Enclosure Material	Metal
Height	294 mm
IP-Protection Class	IP30
Length	652 mm
Power Connection	M8 Cable lug (20 Nm)
Weight	54 kg
Width	193 mm

Safety

Balancing	Passive
Battery Management System (BMS)	Integrated Slave BMS
Compatible BMS Master Controller	MG Master HV 300 MG Master HV 500 MG Master HV 500 G2 MG Master LV 24-48 V MG Master LV 72-96 V
Fuses [3]	300 A, Fuse inside

Standards

Approvals	IEC-EN62619 (ES-TRIN) IEC-EN62620 (ES-TRIN)
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

Technical Specifications

Cell Configuration	8S1P
Cycle Life DOD 80% [4]	> 4000
Nominal Capacity	304 Ah
Nominal Energy	7.8 kWh
Nominal Voltage	25.6 V
Specific Energy [5]	145 Wh/kg
System Voltage	24 V 48 V 72 V 96 V ≥ 120 V
Technology	LiFePO4

Footnotes

1 This is the recommended charge voltage at 25 °C.

2 Duration is depending on battery temperature.

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

4 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 lower number of cycles.

5 Including BMS and enclosure.

Logistics

HS code	8507600090
Country of origin	Netherlands
Shipping weight	55.5 kg
Classified as dangerous goods	Yes