

Product Data Sheet

2025-03-31



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

MGLFP244304

Description

The MG LFP Battery 24 V 304 SLP contains the third generation LiFePO₄ chemistry forms the basis of this safe and reliable battery. With the SurLok Plus Connectors, installation is safer and easier. 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 22 modules in series, to create a battery voltage of 563 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) ³	304 A (1.0 C)
Recommended Charge Current ²	< 152 A (0.5 C)

Configuration

Parallel Configuration	Up to 96 modules
Series Configuration	Up to 22 modules

Discharge

Continuous Discharge Current ²	304 A (1.0 C)
Discharge Cut-Off Voltage ¹	24.0 V
Maximum Discharge Current ³	456 A (1.5 C)
Recommended Discharge Current ²	< 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
Height	294 mm
IP-Protection Class	IP30
Length	685 mm
Power Connection	SurLok Plus
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 ⁴	None

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% ⁵	> 4000
Nominal Capacity	304 Ah
Nominal Energy	7.8 kWh
Nominal Voltage	25.6 V
Specific Energy ⁶	145 Wh/kg
System Voltage	24 V 48 V 72 V 96 V ≥ 120 V
Technology	LiFePO4

Footnotes

- ¹ Voltage is depending on battery temperature and state of charge.
- ² Current is depending on battery temperature and state of charge.
- ³ Current is depending on battery temperature and state of charge. Duration is depending on battery temperature.
- ⁴ 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.
- ⁵ 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.
- ⁶ Including BMS and enclosure.

The specifications provided are for informational purposes only and are subject to change without notice. While every effort has been made to ensure the accuracy and completeness of the specifications, MG Energy Systems assumes no responsibility for any errors or omissions.



Logistics

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