

Product Data Sheet

2026-01-16



MG LFP Battery 25.6V/304Ah/7800Wh

MGLFP240304

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 4 modules in series, to create a battery voltage of 96 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

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|------------------------|------------------|
| Parallel Configuration | Up to 96 modules |
| Series Configuration | Up to 4 modules |

Discharge

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|---|-----------------|
| 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

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|-----------------------------------|---------------|
| 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

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|---------------------|----------------------|
| Cooling | Air, Convection |
| Data Connection | CAN-Bus RJ45 |
| 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

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|----------------------------------|---|
| 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

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|-----------------------|--|
| 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 |
| 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.
- ⁵ Higher battery temperature will result in lower number of cycles.
- ⁵ 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

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