

12.8 V / 210 AhItchnologyLithium-Ion next generation LiFePo4Cell configuration452PNominal voltage12.8 VNominal apacity210 AhNominal energy2.7 kWhCycle Life DOD 80% 1> 3500Specific energy 212.3 Wh/KgWeight22 kgDischarge cut-off voltage10.8 VRecommended discharge current105 A (0.5 C)Continuous discharge current210 A (1.0 C)Maximum discharge current 3420 A (2.0 C)Fuses 4300A, fuse insideCharge14.6 VRecommended charge current105 A (0.5 C)Continuous discharge current 1105 A (0.5 C)Continuous discharge current210 A (1.0 C)Max. charge voltage14.6 VRecommended charge current105 A (0.5 C)Continuous charge current105 A (0.5 C)Continuous charge current105 A (0.5 C)Continuous charge current210 A (1.0 C)Max. tharge voltage14.2 VRecommended charge current20 A (2.0 C)Continuous charge current210 A (1.0 C)Maximum charge current20 C (2.0 C)Continuous charge current </th <th>Technical specifications</th> <th>MGLFP120210</th>	Technical specifications	MGLFP120210
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Battery Management System (BMS)Integrated slave BMSBalancingPassiveCompatible BMS master controllerMG Master LV 12VCommunicationCAN-Bus (RJ45 connection)StandardsEMC: EmissionEN-IEC 61000-6-3:2007/A1:2011/C11:2012EMC: ImmunityEN-IEC 61000-6-1:2007	Dimensions ( l x h x w )	395 x 276 x 154 mm
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,	EMC: Emission	EN-IEC 61000-6-3:2007/A1:2011/C11:2012
Low voltage directive EN 60335-1:2012/AC:2014	EMC: Immunity	EN-IEC 61000-6-1:2007
	Low voltage directive	EN 60335-1:2012/AC:2014

<sup>1</sup>End-of-Life is 70% of initial capacity at 25 °C.

<sup>2</sup> Including BMS and enclosure

<sup>3</sup> Duration is depending on battery temperature.

<sup>4</sup> Fuses can be replaced with dummy fuses for high power and high voltage applications. In this case the batteries need to be fuse elsewhere in the circuit.

# **LFP** Series 12.8 V Lithium-Ion battery modules



Marine Electric propulsion Aux. battery bank

Industrial Peak shaving **UPS** systems

### Innovation in energy storage

Off-grid/Solar Self-consumption Off-grid solutions

Automotive Mobile power sources Electric mobility

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### LFP Series

This robust battery is based on the next generation LiFePo4 chemistry. The advantage of this next generation chemistry is the higher energy density. The modules are very compact and light weight with high charge and discharge capability. The 12.8 V LFP series can be used for applications in various markets such as mobile and marine. Scalable and reliable battery banks can be created while keeping the ease of installation and the minimum use of external components.



#### LFP battery modules 12.8 V - 2.7 kWh

- Next generation LiFePo4 chemistry
- Lead-acid replacement
- Easy installation



## Applications

The 12.8 V LFP series can be used for various applications in several markets. For example the energy supply for campers, trucks, motor homes, boats and racing catamarans where weight is important.

Plug and Play: Automatic configuration

• High charge and discharge rate

Extended cycle life

### **U**Easy installation

Combining the LFP series batteries with the MG Master LV creates a compact system with reduced wiring and external components. The MG Master LV combines battery monitoring and control, DC distribution, fuse box and shunt in one device which saves installation time and space.





### Safety

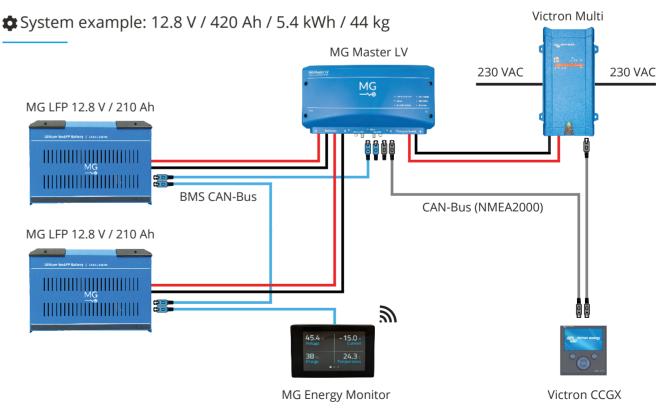
Each battery module comes with an integrated battery management system (BMS). This is an intelligent electronic module (slave BMS), that measures all cell voltages and temperatures to control balancing on both battery cell and module level. The battery modules communicate by a galvanic isolated CAN-Bus with the MG Master LV (master BMS), which collects and monitors the status of all battery modules. If the measured values from a battery module exceed the limit, the MG Master will automatically take action to protect the connected battery modules.

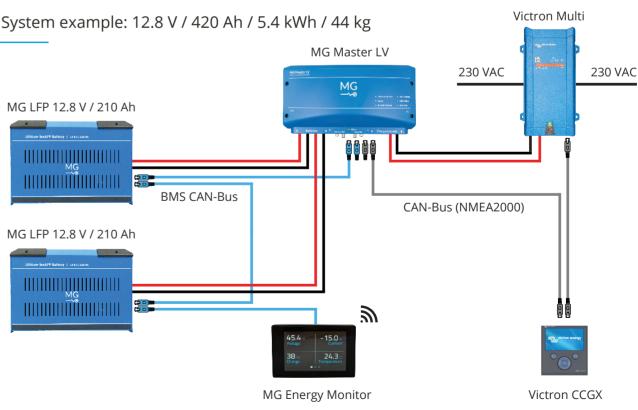
### Battery management controllers

Protecting, monitoring and controlling a battery system is very important to create a safe, reliable and easy-to-use system. The MG Master LV is the safety and control unit of the battery system. It protects the connected battery modules against over-charging, overdischarging, over-temperature, under-temperature and controls the balancing of the battery cells. Besides a safety funtion, the MG Master LV monitors and tracks other important parameters to give insight in the battery status and energy consumption. MG's battery system CAN-bus protocol can be used to communicate with other equipment and multi functional display's (MFD's) by NMEA2000 and web interface. The MG Master LV ensure an easy and proper installation. Thanks to the built-in safety components a reliable installation is guaranteed.

### Energy storage systems

System flexibility is one of the main key features of all MG products. Combining LFP series batteries together with one of the Master BMSs creates a powerful system for a complete range of applications. Redundant systems can be made by connecting multiple Master BMSs in parallel to increase system reliability and capacity.







MG Master LV



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