



DATASHEET

MASON 12V20Ah

The Mason 12V20Ah power battery is light-weighted, compact and offers high performances. Thanks to its lithium iron phosphate technology and integrated BMS system this new generation battery is extremely reliable and offers optimal safety. This battery is developed for motorsport, motorcycle and automotive applications. Suitable for 12V systems and for use in extreme environments.

LIGHTWEIGHT POWER

With a weight of $\pm 4.6\text{kg}$ /10.14lbs, the Mason 12V20Ah power battery saves up to 60% in weight in comparison to traditional lead-acid batteries and is only 1/3 of the size of a conventional battery. This improves not only the performance of your vehicle but also helps to increase the fuel economy.

The battery offers a high level of power, fast charging and a long, maintenance free service life. It also has a stable and flat discharge which means you have over 80% of the battery capacity available.

INTEGRATED BMS

The Mason 12V20Ah power battery incorporates a Battery Management System (BMS) to ensure a high level of safety during use. The BMS constantly monitors the status of individual battery elements such as cell temperature, cell voltage, charge and discharge currents. The integrated BMS also provides cell balancing.

SAFE AND RELIABLE

Due to its high ingress protection class (IP66) the battery is dust tight and waterproof. Therefore the battery can be used in the most extreme environments as well.

ELECTRICAL SPECIFICATIONS

Nominal Capacity	20Ah
Energy	256Wh
Nominal Voltage	12.8V
Open Circuit Voltage	13.2V
Self Discharge	<3% per Month
Cycle life	>1000 cycles at 10C discharge (100% DoD)
EqPb (Equals lead-acid)	70 to 100Ah

CHARGE & DISCHARGE SPECIFICATIONS

Charge Method	CCCV
Charge Voltage	14.3V - 14.6V
Max Charge Current	66A
End of Discharge Voltage	8V
Discharge Current Continuous	260A
Discharge Pulse Current (1 sec)	892A (45C)

COMPLIANCE SPECIFICATIONS

Certifications	CE, UKCA, UN 38.3, UN ECE R10, UL 1642
Shipping Classification	UN3480

MECHANICAL SPECIFICATIONS

Dimensions (LxWxH)	255 x 101 x 171mm 10.0" x 4.0" x 6.7"
Weight	±4.6 kg / 10.14 lbs
Case Material	PC - ABS
Ingress Protection	IP66
Cell Type / Chemistry	Cylindrical - LiFePO4

TEMPERATURE SPECIFICATIONS

Charge Temperature	0°C to 55°C 32°F to 131°F
Discharge Temperature	-30°C to 55°C -22°F to 131°F
Storage Temperature	-40°C to 60°C -40°F to 140°F

GENERAL PRODUCT SPECIFICATIONS

EAN-13	8718531361812
Battery Designation	4IFpR27/66-8

PERFORMANCE



Fast charging



Lightweight



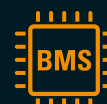
Long and maintenance free lifespan



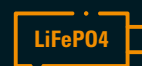
Compact size



Low self-discharge



Integrated BMS



High thermal stability