

EASy Module

80 Ah LFP Lithium Ion Battery Module

High Power Module
38.4 V / 3.1 kWh

The **EASy Module** battery system is ideally suited for applications requiring high power density, continuous high charge and discharge rates and very safe operation.

Features and Benefits

- ▲ Very safe cell chemistry
- ▲ Robust aluminum casing avoids corrosion and provides shock resistance for demanding applications
- ▲ Series connection of battery modules (string) up to 1,000 V DC
- ▲ In parallel connected battery strings can be configured to battery systems with very scalable power / voltage ranges
- ▲ High maximum pulse discharge rate to meet exceptional peak demands
- ▲ Made in Germany
- ▲ Multistage master slave BMS
- ▲ Liquid cooling
- ▲ EASy to service and maintain
- ▲ Cobalt and nickel free, no NMP used
- ▲ Tested and certified to UN 38.3, DNV and EN 62619 / 62620

Mechanical Characteristics Module

Width	290	mm
Height	290	mm
Depth (excluding cover)	559	mm
Weight (approx.)	62	kg
Volume	47	l
IP Class	IP65	

Chemical Characteristics

Cathode	Lithium Iron Phosphate (LFP)
Anode	Graphite

Electrical Characteristics

Nominal capacity @ 1 C @ 25 °C	80	Ah
Nominal operating voltage	38.4	V
Recommended charging voltage	42.0	V
Maximum charging voltage	43.2	V
Recommended cut-off discharge voltage	30.0	V
Energy	3.1	kWh
Specific energy	50	Wh/kg
Energy density	66	Wh/l

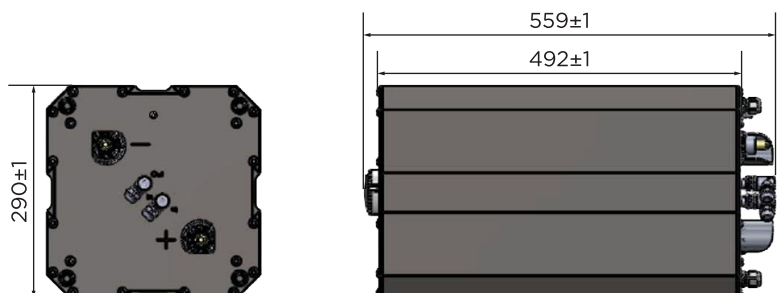
Specific power

Continuous discharge @ 5 C / 50 % SoC	250	W/kg
2 s pulse discharge @ 15 C / 50 % SoC	750	W/kg

Power density

Continuous discharge @ 5 C / 50 % SoC	328	W/l
2 s pulse discharge @ 15 C / 50 % SoC	989	W/l

External communication interface	CAN (further options possible)
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Applications and Markets

- ▲ Hybrid electric drives
- ▲ Electric drives
- ▲ Load leveling and peak shaving
- ▲ Boosting and manoeuvring
- ▲ Heavy duty vehicles
- ▲ Off-Road vehicles
- ▲ Rail and transport
- ▲ Mining
- ▲ Electric cranes
- ▲ Material handling
- ▲ Port infrastructure
- ▲ Hybrid and electric ships

Data in this document are subject to change without notice and become contractual only after written confirmation by EAS Batteries.

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Operating Conditions

Recommended charging method	Constant Current/ Constant Voltage
Recommended continuous charging current	80 A (1 C)
Maximum continuous charging current	240 A (3 C)
Discharge current @ 25 °C	
Recommended	80 A (1 C)
Maximum continuous	400 A (5 C)
Maximum pulse (2 s)	1,200 A (15 C)
Storage and transport conditions	
	25 to 50 % SoC
Maximum temperature range	-20 °C to 50 °C
Recommended temperature range	10 °C to 25 °C
Operating temperature	
Discharge	0 °C to 40 °C
Charge (recommended)	10 °C to 30 °C
Cycle life @ 20 °C (EoL @ 80 % of nominal capacity)	
100 % DoD, 1 C	> 5,000 cycles
80 % DoD, 1 C	> 6,250 cycles

Example of configuration

System voltage
880 V

Energy content
70 kWh

Continuous power
350 kW

23 modules plus
battery management unit



Alternatively

Taylored to
your requirements

