

# HE 602030 LFP

## 38 Ah/ 122 Wh

### Prototype Datasheet

#### Physical and mechanical characteristics

Diameter	60 mm
Height	232 mm (203 mm without terminals)
Terminals	Positive terminal Al M12 L: 9 mm Negative terminal Cu M12 L: 9 mm
Weight	approx. 1450 g
Volume without terminals	0.57 l
Case material	Stainless Steel

#### Chemical characteristics

Positive electrode	Lithium iron phosphate
Negative electrode	Graphite

#### Electrical characteristics\*

Nominal voltage	3.2 V
Nominal capacity at 0.2 C	38 Ah
Minimum capacity	36 Ah
AC Impedance (1 kHz)	≤ 1 mΩ
DC Resistance (ESR) (2 s pulse discharge @ 20 C/ 50% SOC)	≤ 2 mΩ
Specific energy at 0.2 C	84 Wh/kg
Energy density at 0.2 C	212 Wh/l
Specific power (2 s pulse discharge @ 16 C/ 100% SOC)	1040 W/kg
Power density (2 s pulse discharge @ 16 C/ 100% SOC)	2640 W/l

#### Operating conditions\*

Recommended charge method	Constant current - constant voltage
End of Charge	$I \leq C/10$
Maximum charge voltage	3.8 V
Recommended charge current	up to 19 A (0.5 C)
Continuous charge current	up to 76 A (2 C)
Maximum pulse charge current (10 s) (Max. SOC 70 %, average current < 76 A)	152 A (4 C)
Recommended voltage limit for discharge	2.5 V
Lower voltage limit for discharge	2.1 V
Lower voltage limit for pulse discharge	2 V
Recommended discharge current	up to 19 A (0.5 C)
Maximum discharge current	up to 152 A (4 C)
Maximum pulse discharge current (2 s)	up to 608 A (16 C)
Operating temperature	- 30°C to + 60°C
Recommended charge temperature	0°C to + 40°C
Storage and transport temperature	- 40°C to + 60°C
Cycle life at 20°C and 100% DOD (0,5 C charge; 0,5 C discharge)	> 1000 cycles to 80% nominal capacity > 2000 cycles to 60% nominal capacity

\* Reference temperature 20°C

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Data in this document are subject to change without notice and are not binding.