



MP602030 LFP 50

50 Ah LFP Lithium Ion
Battery Cell

Medium Power Cell
3.2 V / 50 Ah / 160 Wh

The lithium iron phosphate battery cell **MP602030 LFP 50** is ideally suited for applications both requiring power and energy density, high charge and discharge rates and very safe operation.

Features and Benefits

- ▲ Very safe cell chemistry
- ▲ Robust stainless-steel casing avoids corrosion and provides shock resistance for harsh environment applications
- ▲ M12 terminals for easy assembly and low resistance interfaces
- ▲ Suitable for low temperature operation
- ▲ Made in Germany
- ▲ UN 38.3 certified

Mechanical Characteristics

Diameter	60	mm
Length	232	mm
Length without terminals	203	mm
Weight	1.35	kg
Volume	0.57	l

Chemical Characteristics

Cathode	Lithium Iron Phosphate (LFP)
Anode	Graphite

Electrical Characteristics

Maximum capacity @ 1 C @ 25 °C	53	Ah
Nominal capacity @ 1 C @ 25 °C	50	Ah
Nominal operating voltage	3.2	V
Charging voltage	3.5	V
Recommended cut-off discharge voltage	2.5	V
Energy	160	Wh
Discharge current @ 25 °C		
Recommended	50	A (1 C)
Maximum continuous	250	A (5 C)
Maximum pulse (2 s)	500	A (10 C)
AC Impedance (1 kHz)		
	< 0.8	mΩ
DC Resistance (2 s pulse @ 10 C / 50 % SoC)		
	< 1.3	mΩ
Specific energy	118	Wh/kg
Energy density	280	Wh/l
Specific power		
continuous discharge @ 5 C / 50 % SoC	530	W/kg
2 s pulse discharge @ 10 C / 50 % SoC	1,030	W/kg
Power density		
continuous discharge @ 5 C / 50 % SoC	1,290	W/l
2 s pulse discharge @ 10 C / 50 % SoC	2,450	W/l

