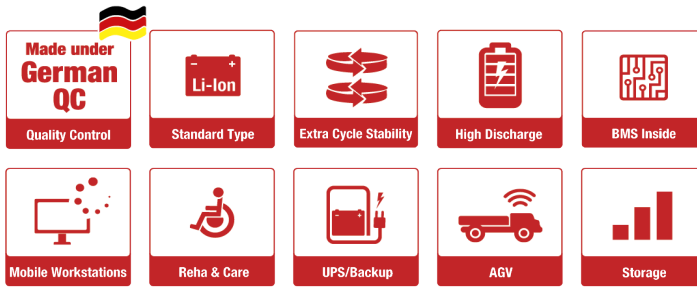


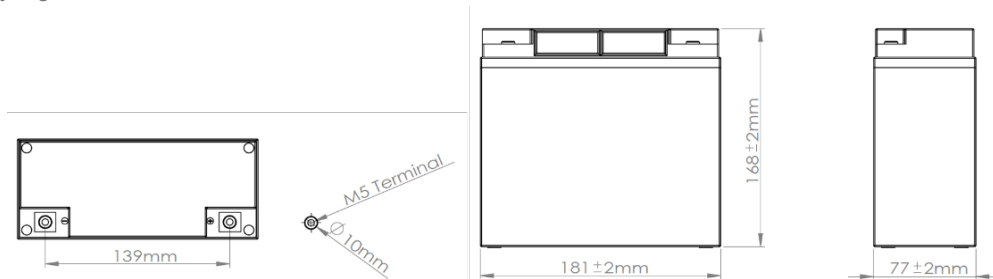
Lithium Iron Phosphate (LiFePO₄)

LiBrick S12-20



Main Applications

- + Mobile Workstations
- + Reha & Care
- + UPS/Backup
- + AGV
- + Storage
- + Medical Devices
- + Emergency Lights



Electrical Parameter	
Cell type	26650
Technology	Lithium Iron Phosphate (LFP)
Configuration	4S5P
Nominal voltage	12,8 V
Rated capacity	20 Ah
Rated energy	256 Wh
Internal resistance	30 mΩ
Interconnectable (serial)	4
Interconnectable (parallel)	10

Mechanical Parameter	
Length	181 mm
Width	77 mm
Height	168 mm
Weight	2300 g
Volumetric energy density	110,0 Wh/l
Gravimetric energy density	111,3 Wh/kg
Housing	ABS; V0 - UL94
Protection level	(not certified) IP56
Special features	designed for highest safety
Life span* >	5 Years

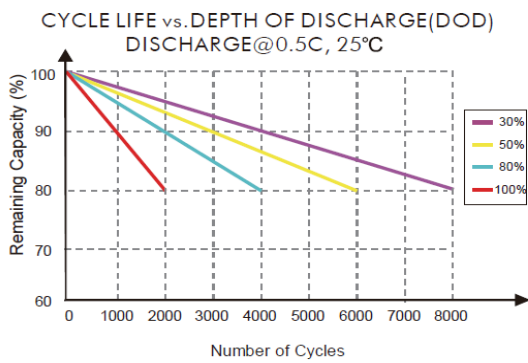
Charge Parameter	
Charging methode	CC-CV
Recommended charge current	10 A
Maximum charge current	30 A
End of charge voltage	14,2 V
Temperature range charge	0 - 45 °C
Temperature range storage	0 - 40 °C
Humidity range	5-85% %RH
Recuperation	/ A
Cycle life* at 80% DOD	4000

Discharge Parameter	
Constant discharge current	20 A
Peak discharge current	60 A
Duration of peak discharge	5 s
End of discharge voltage	10 V
Temperature range discharge	-20 - 60 °C
Discharge current @ < -20°C	4 A
Discharge current @ -15°C	10 A
Discharge current @ > 0°C	30 A
Capacity drop at low temp.	80% (0°C/0,2C) 50% (-10°C/0,2C)

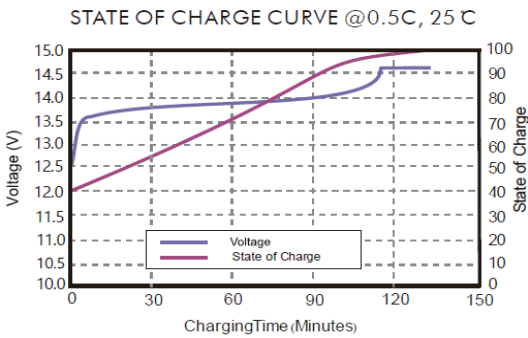
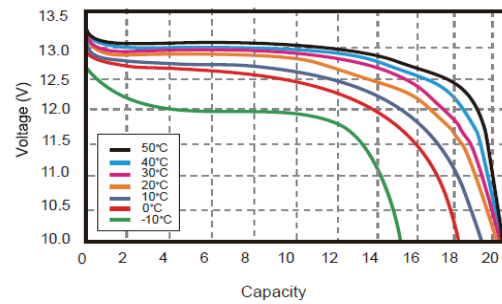
BMS Parameter		
Short circuit protection	200-500	μ S
Over current protection	120 \pm 10	A
Over current protection	\leq 10	mS
Deep disch. protection cell	2,0 \pm 0,1	V
Deep discharge protection	100-200	mS
Over voltage protection cell	3,9 \pm 0,05	V
Over voltage protection	\leq 1000	ms
Over temp. protection >	65 \pm 5	$^{\circ}$ C
Balancing start voltage >	3,6 \pm 0,25	V
Board consumption (sleep)	20	μ A

Interconnector / Interfaces	
Charge	M5 Terminal
Discharge	M5 Terminal
Data	/
Communication	/
Communication protocol	/

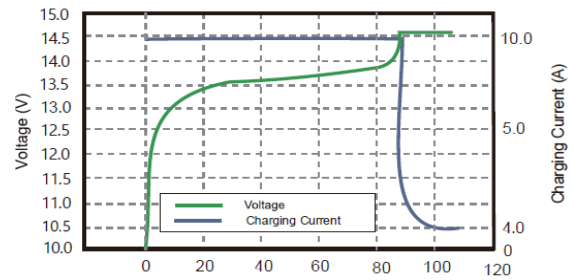
M5



DISCHARGE CAPACITY at VARIOUS TEMPERATURES
DISCHARGE @0.5C



CHARGING CHARACTERISTICS @0.5C, 25°C



Suitable Accessories

Compliance	
UN38.3	Yes
RoHS	Yes
REACH	Yes
CE	Yes
UL1642	Cell
IEC 62133-2:2017	Ready
UL2054	Ready

*Values are approximations only. Cycle life and life span significantly depend on usage patterns and ambient conditions.

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