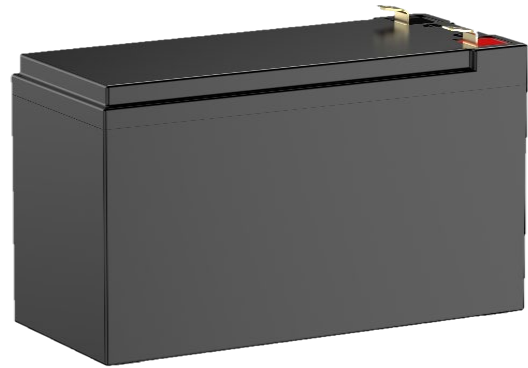
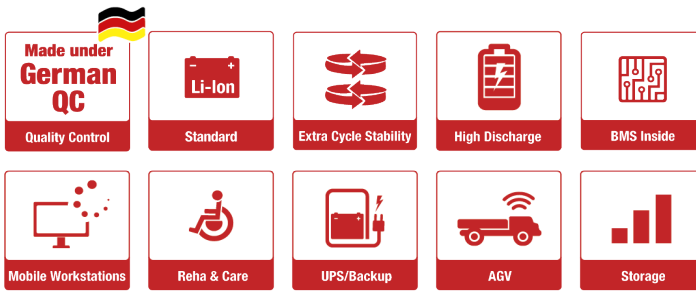


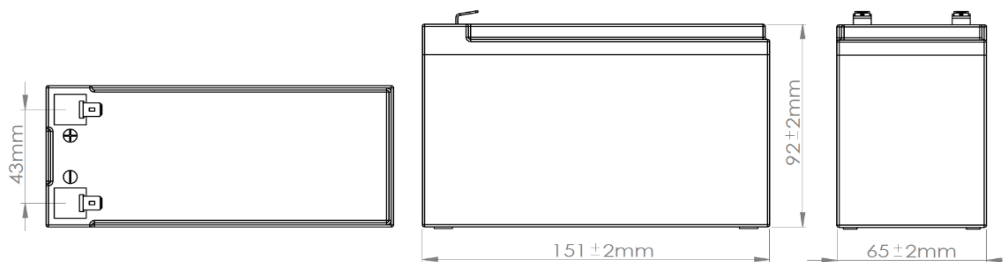
## Lithium Iron Phosphate (LiFePO<sub>4</sub>)

## LiBrick S12-7.5 T1



### Main Applications

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



Electrical Parameter	
Cell type	18650
Technology	Lithium Iron Phosphate (LFP)
Configuration	4S5P
Nominal voltage	12,8 V
Rated capacity	7,5 Ah
Rated energy	96 Wh
Internal resistance	40 mΩ
Interconnectable (serial)	4
Interconnectable (parallel)	4

Mechanical Parameter	
Length (±2mm)	151 mm
Width (±2mm)	65 mm
Height (±2mm +2 mm T1)	92 mm
Weight	1100 g
Volumetric energy density	106,3 Wh/l
Gravimetric energy density	87,3 Wh/kg
Housing	ABS; V0 - UL94
Protection level	(not certified) IP56
Special features	designed for highest safety
Life span* >	5 Years

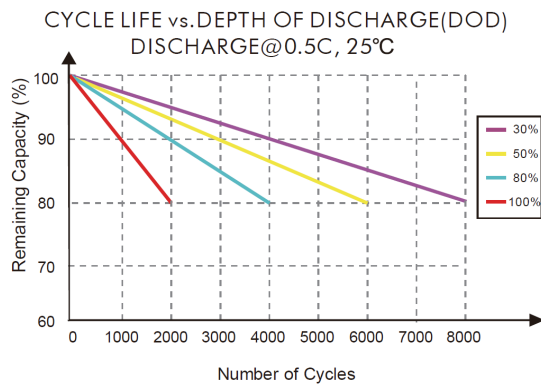
Charge Parameter	
Charging methode	CC-CV
Recommended charge current	3,75 A
Maximum charge current	7,5 A
End of charge voltage	14,6 V
Temperature range charge	0 - 45 °C
Temperature range storage	0 - 40 °C
Humidity range	5-85% %RH
Recuperation	/ A
Cycle life* at 80% DOD	4000

Discharge Parameter	
Constant discharge current	20 A
Peak discharge current	37,5 A
Duration of peak discharge	5 s
End of discharge voltage	10 V
Temperature range discharge	-20 - 60 °C
Discharge current @ < -20°C	0 A
Discharge current @ -15°C	3,5 A
Discharge current @ > 0°C	20 A
Capacity drop at low temp.	80% (0°C/0,2C) 50% (-10°C/0,2C)

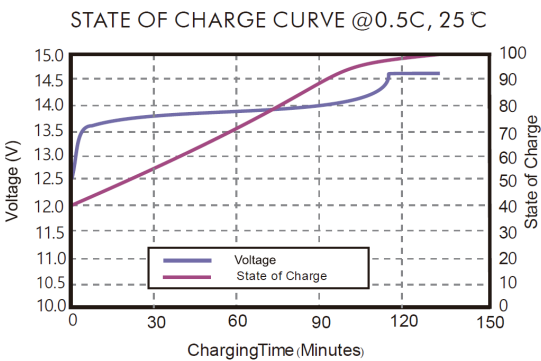
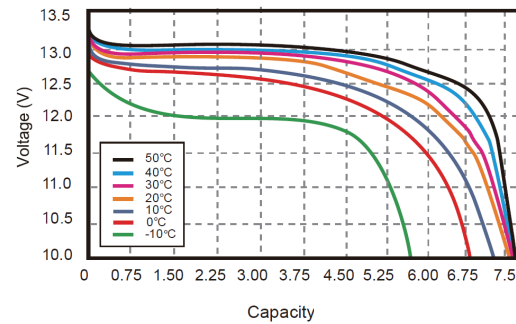
BMS Parameter		
Short circuit protection	100-600	$\mu$ S
Over current protection	50 $\pm$ 10	A
Over current protection	$\leq$ 300	mS
Deep discharge protection cell	2,0 $\pm$ 0,1	V
Deep discharge protection	$\leq$ 300	mS
Over voltage protection cell	3,9 $\pm$ 0,05	V
Over voltage protection	$\leq$ 2000	ms
Over temp. protection >	65 $\pm$ 5	$^{\circ}$ C
Balancing start voltage >	3,6 $\pm$ 0,05	V
Board consumption (sleep)	100	$\mu$ A

Interconnector / Interfaces	
Charge	T1
Discharge	T1
Data	/
Communication	/
Communication protocol	/

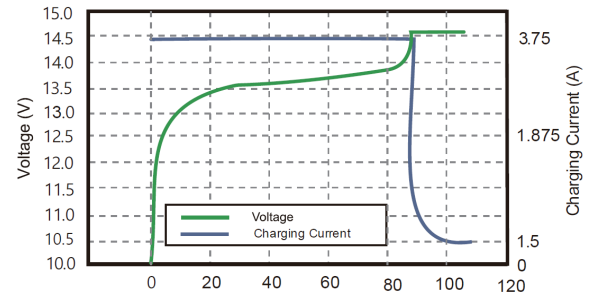
**T1**



**DISCHARGE CAPACITY at VARIOUS TEMPERATURES  
DISCHARGE @0.5C**



**CHARGING CHARACTERISTICS @0.5C, 25 $^{\circ}$ 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.

All information and data in this document or otherwise made available are subject to change. The recipient is responsible for checking and verifying the extent to which the information contained is applicable. At the time of publication, all information given herein is believed to be accurate and reliable, but it is presented without guarantee, warranty, or responsibility of any kind, expressed or implied.

The information is intended for use only by partners who have the requisite experience and capability to determine the correct products for their application. Any technical advice inferred from this information or otherwise provided by Battery-Kutter with reference to the use of products provided is given without regard, and Battery-Kutter assumes no obligation or liability for the advice given or results obtained.

Specifications subject to change without notice. This data sheet becomes invalid upon the release of a new version.