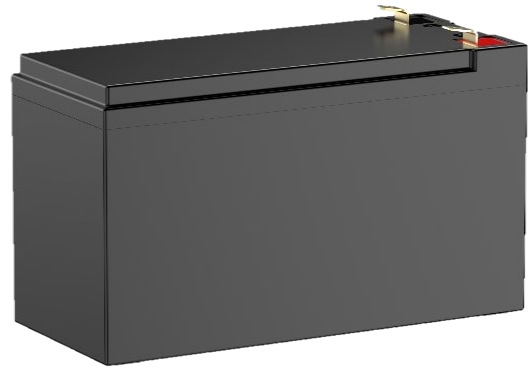
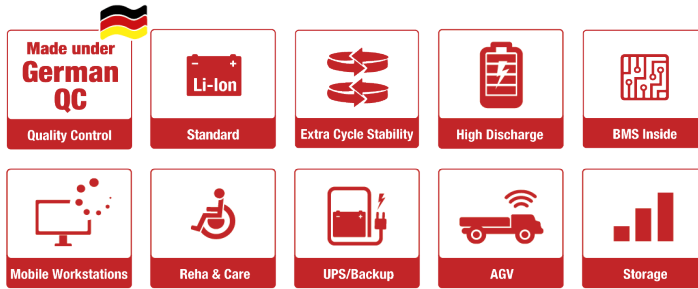


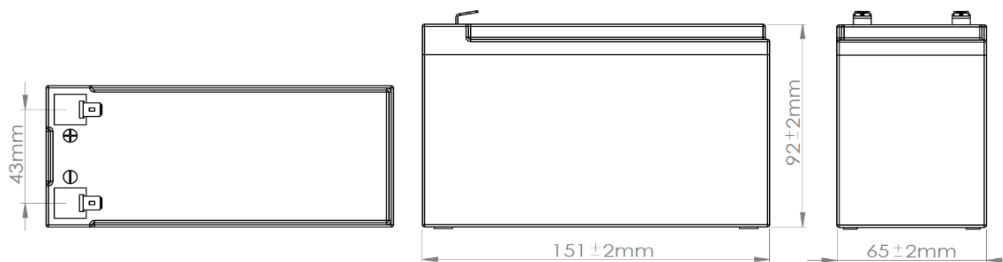
## Lithium Iron Phosphate (LiFePO<sub>4</sub>)

## LiBrick S12-7.5 T2



### 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	30 mΩ
Interconnectable (serial)	4
Interconnectable (parallel)	4

Mechanical Parameter	
Length (±2mm)	151 mm
Width (±2mm)	65 mm
Height (±2mm +2 mm T2)	92 mm
Weight	1100 g
Volumetric energy density	4011,0 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

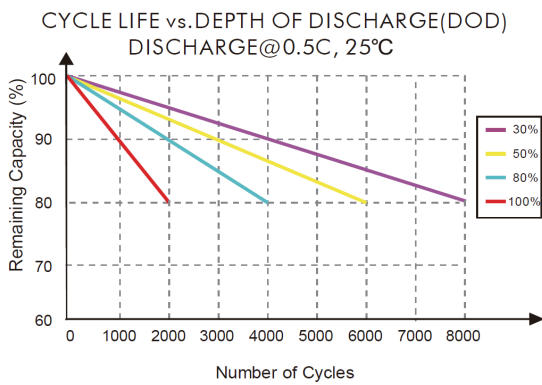
Charge Parameter	
Charging methode	CC-CV
Recommended charge current	3,75 A
Maximum charge current	7,5 A
End of charge voltage	14,6 V
Temperature range charge	0 - 45 °C
Temperature range storage	0 - 40 °C
Humidity range	5-85% %RH
Recuperation	/ A
Cycle life* at 80% DOD	4000

Discharge Parameter	
Constant discharge current	15 A
Peak discharge current	45 A
Duration of peak discharge	5 s
End of discharge voltage	10 V
Temperature range discharge	-20 - 60 °C
Discharge current @ < -20°C	2,4 A
Discharge current @ -15°C	6 A
Discharge current @ > 0°C	20 A
Capacity drop at low temp.	80% (0°C/0,2C) 50% (-10°C/0,2C)

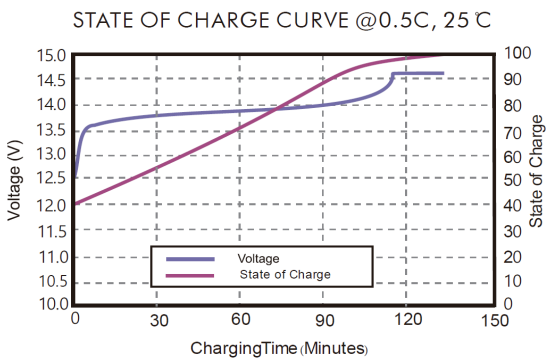
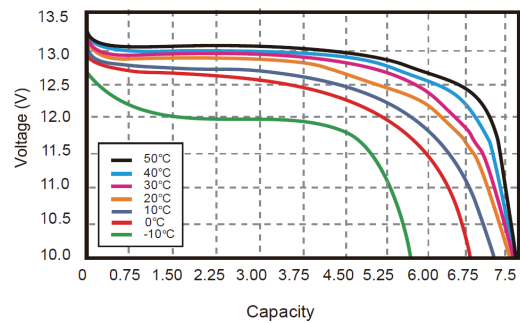
BMS Parameter		
Short circuit protection	200-800	$\mu$ S
Over current protection	50 $\pm$ 10	A
Over current protection	$\leq$ 300	mS
Deep discharge protection cell	2 $\pm$ 0,1	V
Deep discharge protection	$\leq$ 300	mS
Over voltage protection cell	3,9 $\pm$ 0,05	V
Over voltage protection	$\leq$ 2000	ms
Over temp. protection >	65 $\pm$ 5	$^{\circ}$ C
Balancing start voltage >	3,6 $\pm$ 0,05	V
Board consumption (sleep)	20	$\mu$ A

Interconnector / Interfaces	
Charge	T2
Discharge	T2
Data	/
Communication	/
Communication protocol	/

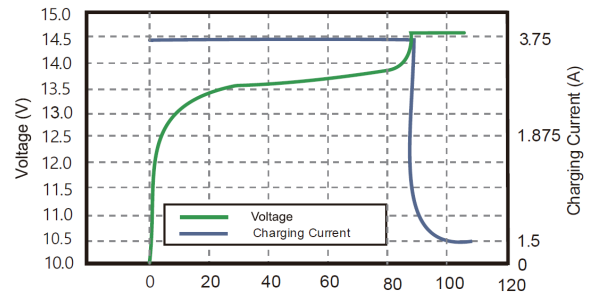
**T2**



**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.

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