

**Type number:**  
LFP 12-50 BL

**Article number:**  
04054LFP50

**EAN/GTIN-Nr.:**  
9005753101883



Monitoring & Diagnosis



Lightweight construction  
Compact design



High discharge performance  
Reliable & stable



IP65 protection  
Dust & water jet protection



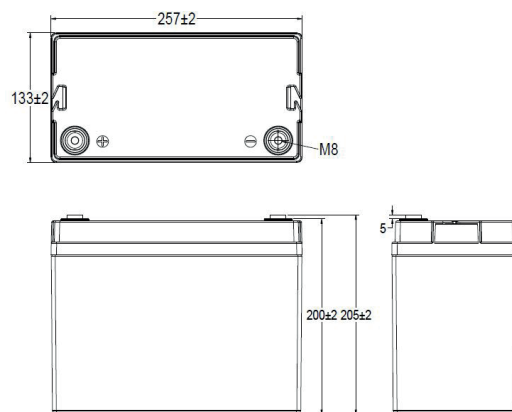
### Electrical Values

Nominal Voltage	12,8 V	Peak Discharge Current Limit	160 A (2~3 s)
Nominal Capacity (K5)	50 Ah @0.2C +25 °C (± 3 %)	Self-Discharge	≤ 4% per month
Nominal Discharge Current	25 A	Cycle Life	> 3.000 cycles (80 % DoD)
Nominal Charge Current	25 A	Internal Resistance	< 30 mΩ
Max. Continuous Discharge Current	50 A	Shipping SOC	47-50 %
Max. Continuous Charge Current	50 A	Cell Technology	LiFePO <sub>4</sub> (LFP)

### Dimensions & Weight

Case Size	
Maximum Length	257 mm
Breite max.	133 mm
Case Height	200 mm
Total Height	205 mm
Weight	5,8 kg (± 5 %)

Dimensions



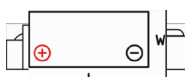
### Design & Configuration

Base Hold-Down	B00
Circuit	Layout 1
Terminal Type	M8 (threaded terminals)
Protection Class	IP65
Units per Pallet	120
Load Carrier-ID	Euro pallet
Units per Layer	20

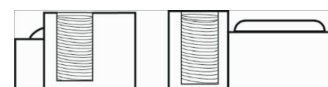
Base Hold-Down



Circuit



Terminal Type



### Technical Values for Discharge

Nominal Discharge Current	25 A
Max. Continuous Discharge Current	50 A

Peak Discharge Current Limit	160 A (2~3 s)
------------------------------	---------------

Discharge Cut-Off Voltage	10 V (2,5 V per cell)
---------------------------	-----------------------

### Technical Values for Charging

Nominal Charge Current	25 A
Max. Continuous Charge Current	50 A

Recommended Charge Voltage	13,6~13,8 V
----------------------------	-------------

Charge Cut-Off Voltage	14,6 V (3,65 V per cell)
------------------------	--------------------------

### Temperature values

Temperature range Discharge	-20 to +60 °C
Temperature range Charge	0 to +60 °C
Temperature range Storage	-5 to +35 °C

### Bluetooth & Wiring

Bluetooth App	yes
---------------	-----

Battery Heating	no
-----------------	----

Wiring	- max. 4 batteries in series - max. 4 batteries in parallel
--------	--

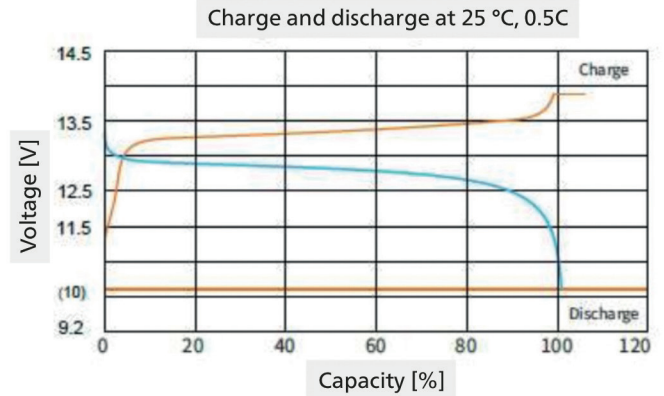
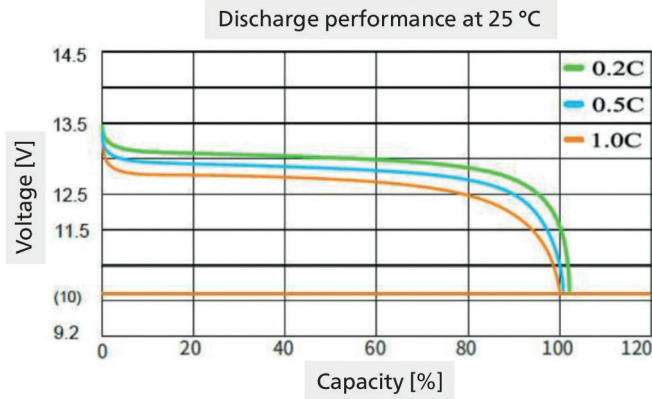
### Certifications

CE, UN38.3, RoHs

### Shipping classification

UN 3480, CLASS 9

### Characteristic curves



### BMS Parameter Settings (Battery-Management-System)

Number of Cell Strings	4	Balancing Start Voltage	3,3 ± 0,03 V
Cell Overvoltage Protection	3,65 V	Differential switch-on voltage	15 mV
Cell Undervoltage Protection	2,5 V	Balancing Current	200 ± 50 mA
Battery Overvoltage Protection	14,6 V	Max. Continuous Charge Current	50 A
Battery Undervoltage Protection	10 V	Max. Continuous Discharge Current	50 A
High-temperature protection during charging	+60 ± 3 °C	Charge Overcurrent Protection	60 ± 5 A
Low temperature protection during charging	+2 ± 3 °C	1st Discharge Overcurrent Protection	60 ± 5 A
High-temperature protection during discharge	+60 ± 3 °C	2nd Discharge Overcurrent Protection	160 ± 40 A
Low-temperature protection during discharge	-20 ± 3 °C	Short Circuit Protection Current	750 ± 130 A

### Safety Instructions

These safety instructions are for the user's protection and the safe operation of the device. Please observe the following points to avoid risks such as injury, electric shock, fire, or other hazards:

- Do not touch any exposed or unprotected connections.
- Always disconnect the charger from the mains power supply before connecting or disconnecting any battery connections.
- Before connecting to the power supply, carefully read the installation instructions in the operating manual.
- Leaking electrolyte can damage skin and eyes. Therefore, avoid all contact.

<sup>1)</sup> All values given refer to a room temperature of +25 °C.

<sup>2)</sup> Recommended with an external, voltage-regulated charger. Caution: Temperature compensation is required in case of deviation!