

LiFePO4 LIX 50 BS

Lithium-Eisenphosphat-Batterien (LiFePO4)



Spezifikationen

Nennspannung	12,8 V
Nennkapazität	50 Ah / 640 Wh
Innenwiderstand	≤ 20 mΩ
Effizienz	99 %
Selbstentladung	≤ 1,5 % / Monat
Max. Batterieanzahl in Reihenverschaltung	4
Max. Batterieanzahl in Parallelverschaltung	4
Zyklenlebensdauer	≥3500 bei 90 % DoD

Entladung

Max. Dauerentladestrom	50 A (30 min)
Max. Puls-Entladestrom	≤ 170 A (3 s)
Empfohlene Last-Abschaltswelle	11 V
BMS Abschaltswelle (Entladung)	10 V ± 0,16 V
BMS Wiedereinschaltung (Entladung)	11,2 V ± 0,16 V

Zulässige Temperaturbereiche

Entladung	- 20 °C bis 60 °C
Ladung	0 °C bis 45 °C
Lagerung	15 °C bis 35 °C
BMS Cut-Off-Temperatur	70 °C

Allgemeine Informationen

Maße (L x W x H)	(196 x 165 x 175 mm) ± 2 mm
Gewicht	6,8 kg ± 0,5 kg
Material	ABS
Schutzklasse	IP 65
Zelltyp / Chemie	Prismatisch, LiFePO4
Anschluss	M6
Artikelnummer	502-52050

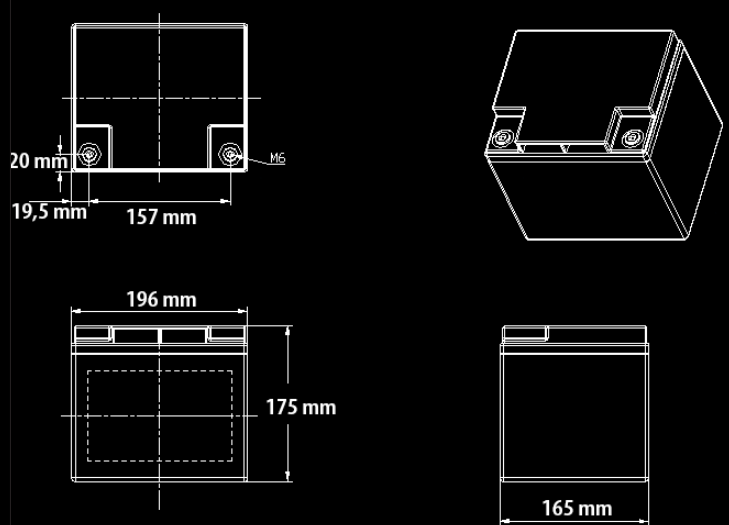
Ladung

Empfohlener Ladestrom	25 A
Maximaler Ladestrom	50 A
Empfohlene Ladespannung	14,6 V ± 0,5 V
Float Ladespannung (Lagerung)	13,8 V ± 0,2 V
BMS Abschaltswelle (Ladung)	15,0 V ± 0,2 V
BMS Wiedereinschaltung (Ladung)	14,4 V ± 0,16 V

Compliance

Zertifikate	CE (Batterie), UL1642 and IEC62133 (Zellen)
Versandklasse	UN 3480, class 9

Abmaße [mm]



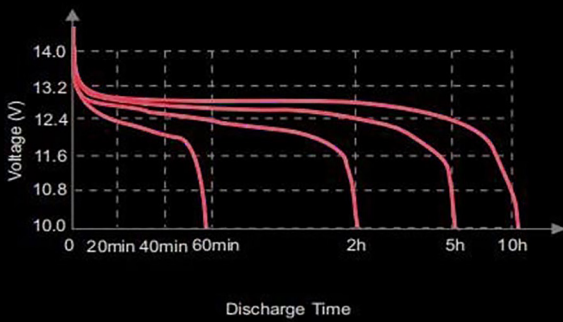
Technische Änderungen, Irrtümer und Druckfehler vorbehalten Stand 03.2023

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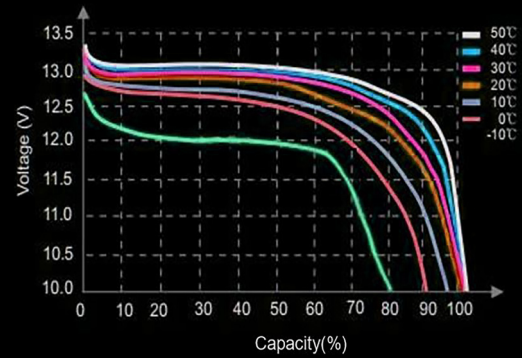
Lithium-Eisenphosphat-Batterien (LiFePO4)



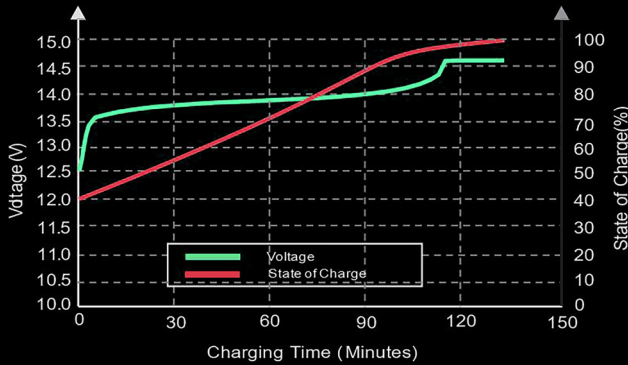
VERSCHIEDENE ENTLADEGESCHWINDIGKEITEN (25 °C)



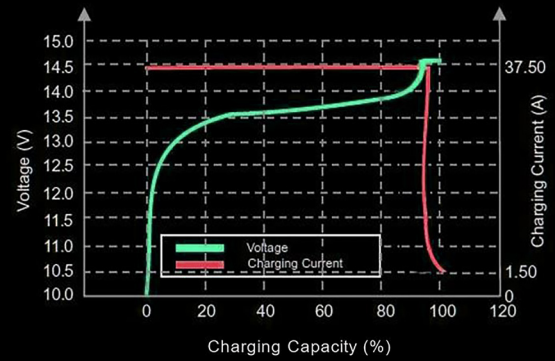
ENTLADEKURVE VERSCHIEDENE TEMPERATUREN (0.5 C)



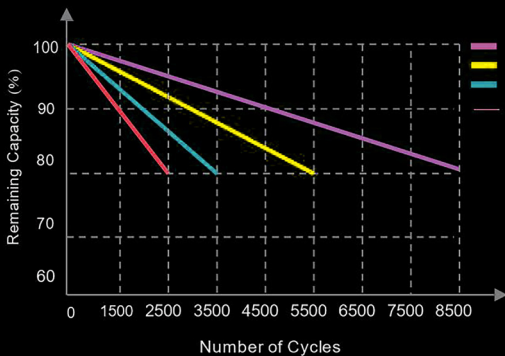
ZUSAMMENHANG LADEZUSTAND UND SPANNUNG (0.5C 25 °C)



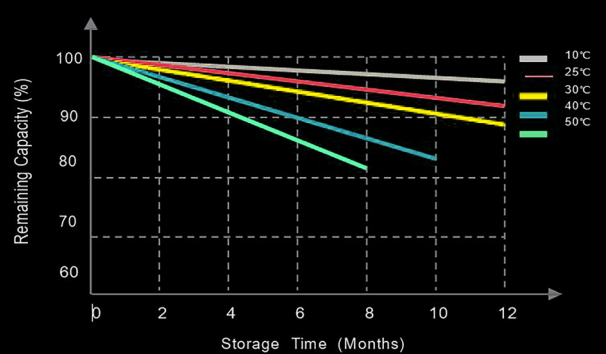
LADECHARAKTERISTIK (0.5C, 25 °C)



ZYKLENFESTIGKEIT IN RELATION ENTLADETIEFE



SELBSTENTLADUNG BEI VERSCHIEDENEN TEMPERATUREN



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LiFePO4 LIX 50 BS

Lithium iron phosphate battery (LiFePO4)



GENERAL SPECIFICATIONS

Nominal Voltage	12,8 V
Nominal Capacity	50 Ah / 640 Wh
Resistance	≤ 20 mΩ
Efficiency	99 %
Self Discharge	≤ 1.5 % / Monat
Maximum Batteries in Series	4
Maximum Batteries in Parallel	4
Cycle Life	≥3500 bei 90 % DoD

DISCHARGE SPECIFICATIONS

Maximum Continuous Discharge Current	50 A (30 min)
Pulse Discharge Current	≤ 170 A (3 s)
Recommended Low Voltage Disconnect	11 V
BMS Discharge Voltage Cut-Off	10 V ± 0.16 V
BMS Reconnect Voltage (Discharging)	11.2 V ± 0.16 V

TEMPERATURE SPECIFICATIONS

Discharge Temperature	- 20 °C bis 60 °C
Charge Temperature	0 °C bis 45 °C
Recommended Storage Temperature	15 °C bis 35 °C
BMS Discharge Cut-Off Temperature	70 °C

GENERAL INFORMATION

Dimensions (L x W x H)	(196 x 165 x 175 mm) ± 2 mm
Weight	6.8 kg ± 0.3 kg
Case Material	ABS
Enclosure Protection	IP 65
Cell Type - Chemistry	Prismatic, LiFePO4
Terminal	M6
Product Code	502-52050

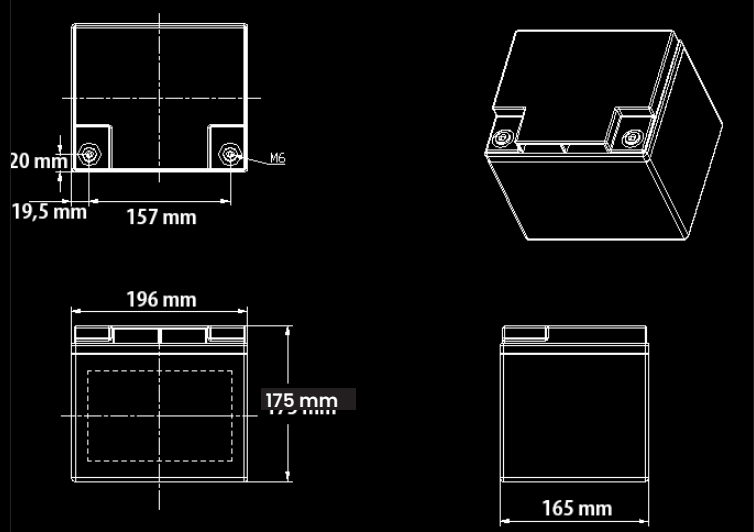
CHARGE SPECIFICATIONS

Recommended Charge Current	25 A
Maximum Charge Current	50 A
Recommended Charge Voltage	14.6 V ± 0.5 V
Float Charge Voltage (Standby use)	13.8 V ± 0.2 V
BMS Charge Voltage Cut-Off	15.0 V ± 0.2 V
BMS Reconnect Voltage (Charging)	14.4 V ± 0.16 V

COMPLIANCE SPECIFICATIONS

Certifications	CE (battery), UL1642 and IEC62133 (cells)
Shipping Classification	UN 3480, class 9

DIMENSIONAL SPECIFICATIONS [mm]



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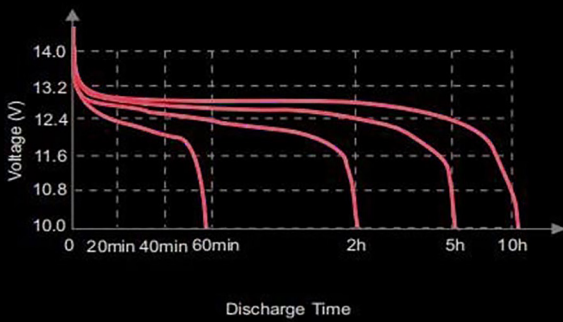
LiFePO4

LIX 50 BS

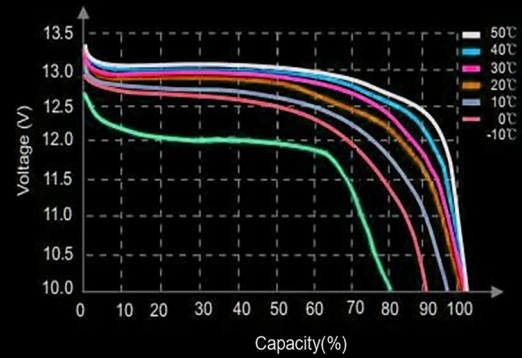
Lithium iron phosphate battery (LiFePO4)



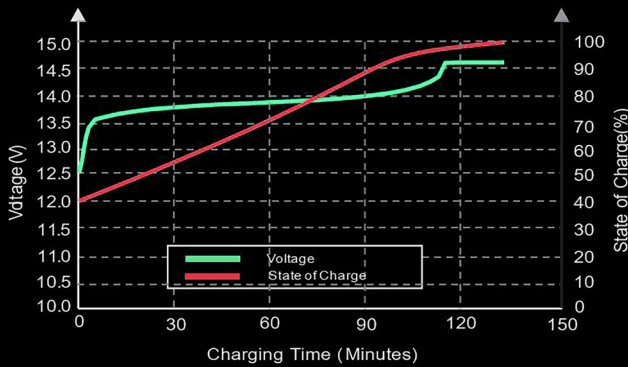
DIFFERENT RATE DISCHARGE CURVE (25 °C)



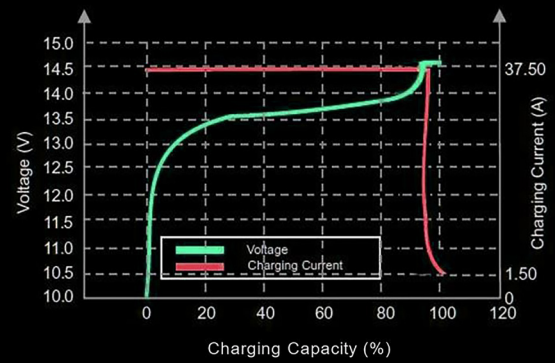
DIFFERENT TEMPERATURE DISCHARGE CURVE (0.5 C)



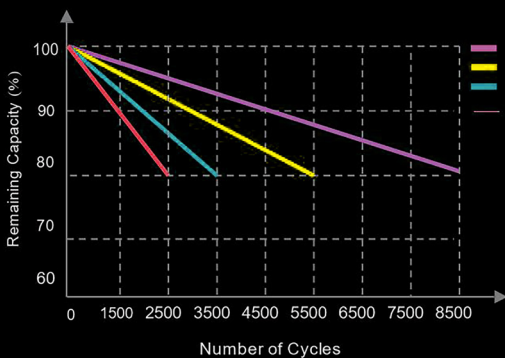
STATE OF CHARGE CURVE (0.5C 25 °C)



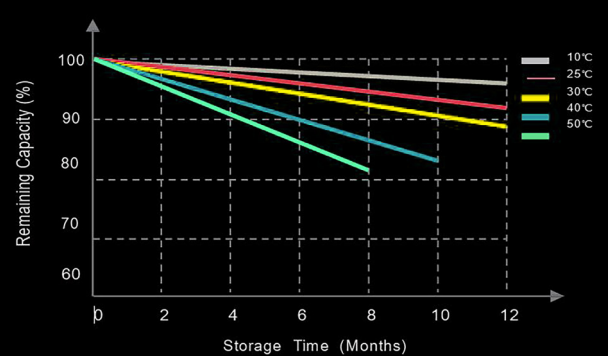
CHARGING CHARACTERISTICS (0.5C, 25 °C)



CYCLE LIFE IN RELATION TO DEPTH OF DISCHARGE



DIFFERENT TEMPERATURE SELF DISCHARGE CURVE



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