

# MPG-24 Series / Data sheet

12V 106Ah

12V 100Ah

**MAKSPower**  
Lithium Batteries



## Model Included:

- MPG24-12106 12V 106Ah LiFePO4 Battery
- MPG24S-12100 12V 100Ah LiFePO4 Battery

For technical advice, contact Makspower

		Model	
		MPG24-12106	MPG24S-12100
Electrical Specifications	Nominal Voltage	12.8V	12.8V
	Nominal Capacity	106Ah	100Ah
	Parallel Connection	No limit	No limit
	Serial Connection	Max. 4units	Max. 4units
	BMS	4S100A	4S150A
	Bluetooth	No	No
	Circuit Protection	Over charge, Over discharge, Over current, Over temp, Short, Balance	
	Cycle Life	3000times Cycles @100%DOD and 6000times @80% DOD	
	Self Discharge	Less than 3% per month	
	Charge Efficiency	100% @0.2C	
	Discharge Efficiency	98-100% @1C	
	Charge Specifications	Charge Voltage	14.4±0.2V
Recommended Current		75A	100A
Max. Con. Charge		75A	100A
Discharge Specifications	Recommended Current	75A	100A
	Max. Con. Current	100A	150A
	Peak Current	500A(300ms)	600A(300ms)
	Cut-off Voltage	10V	10V
Mechanical Specifications	Dimensions (mm)	260×170×208mm (Group 24)	
	Approx Weight(KG)	9,75	10,5
	Terminal Type	M8	
	Case Color/material	Black Plastic case (ABS)	
	IP Rating	IP65	
	Cell Type	3.2V106Ah prismatic cell	Cylinder LiFePO4 cell
	Cell holder	Yes	
Temperature Specifications	Charge Temp	0°C to 55°C	(32°F to 131°F)
	Discharge Temp	-20°C to 60°C	(-4°F to 140°F)
	Storage Temp	-20°C to 45°C	(-4°F to 113°F)

## Key Points for Quality control:

- Cell match:**  
 Much stricter than most suppliers, the strict cell matching standards ensure the consistency of the cells and thus the high consistency of the battery pack.
- Automatic cells welding:**  
 Cells are assembled by Automatic welding equipments to ensure the quality reliability and consistency.
- 100% Cycle test:**  
 All battery packs are 100% cycle tested (Fully Discharged → Fully Charged → Fully Discharged → 60% Charged) before package and all test reports are stored.
- Unique tracking number:**  
 All battery packs are lasered an unique number on the case side for quality tracking.

## Certifications:

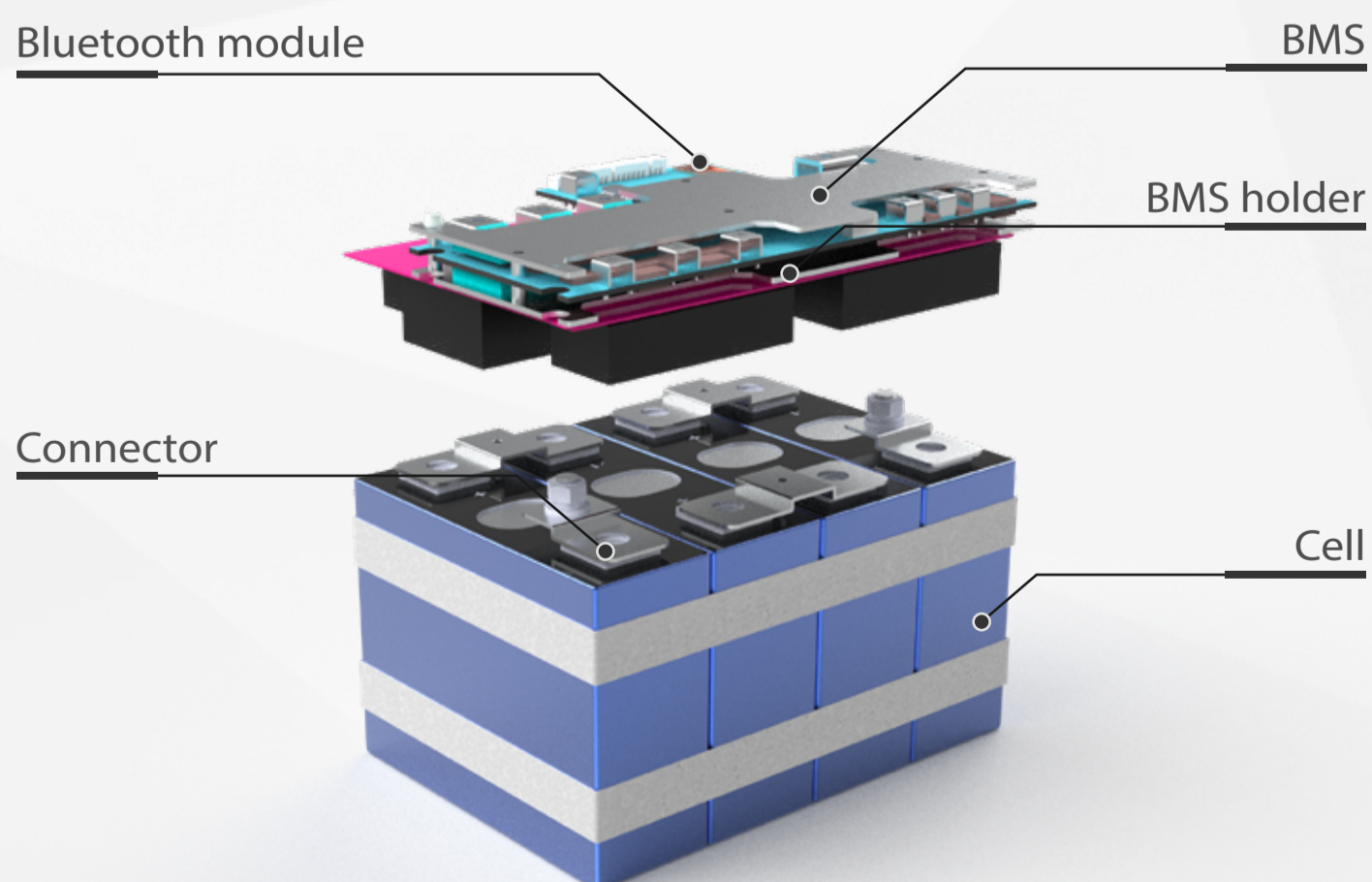
- UL1973 (Cell)
- UL9540 (Cell)
- IEC62133 (Cell)
- IEC62919 (Cell)
- CE (Pack)
- UN38.3 (Cell / Pack)
- ROHS (Cell)



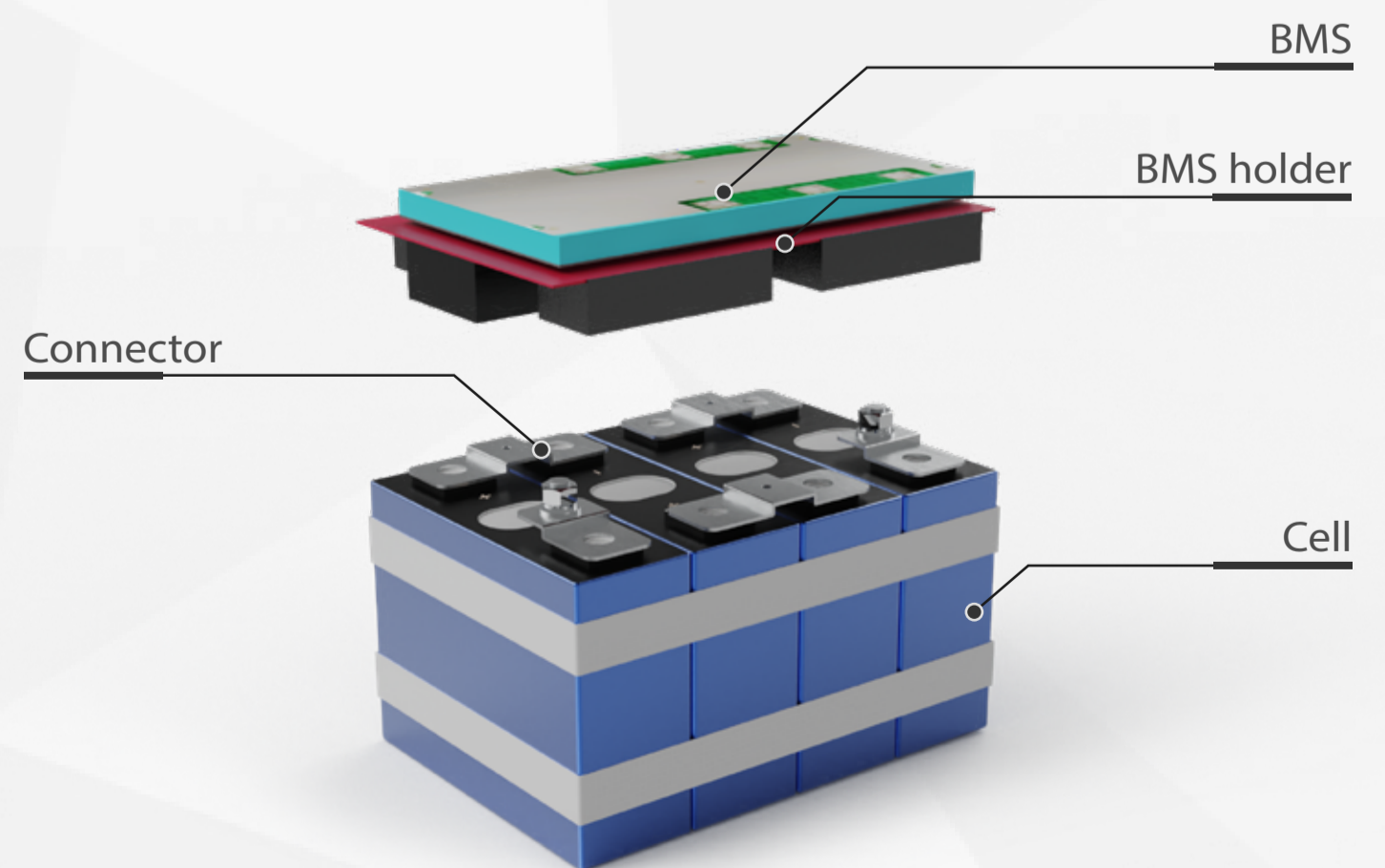
## Dimensions:



## Internal Structure:



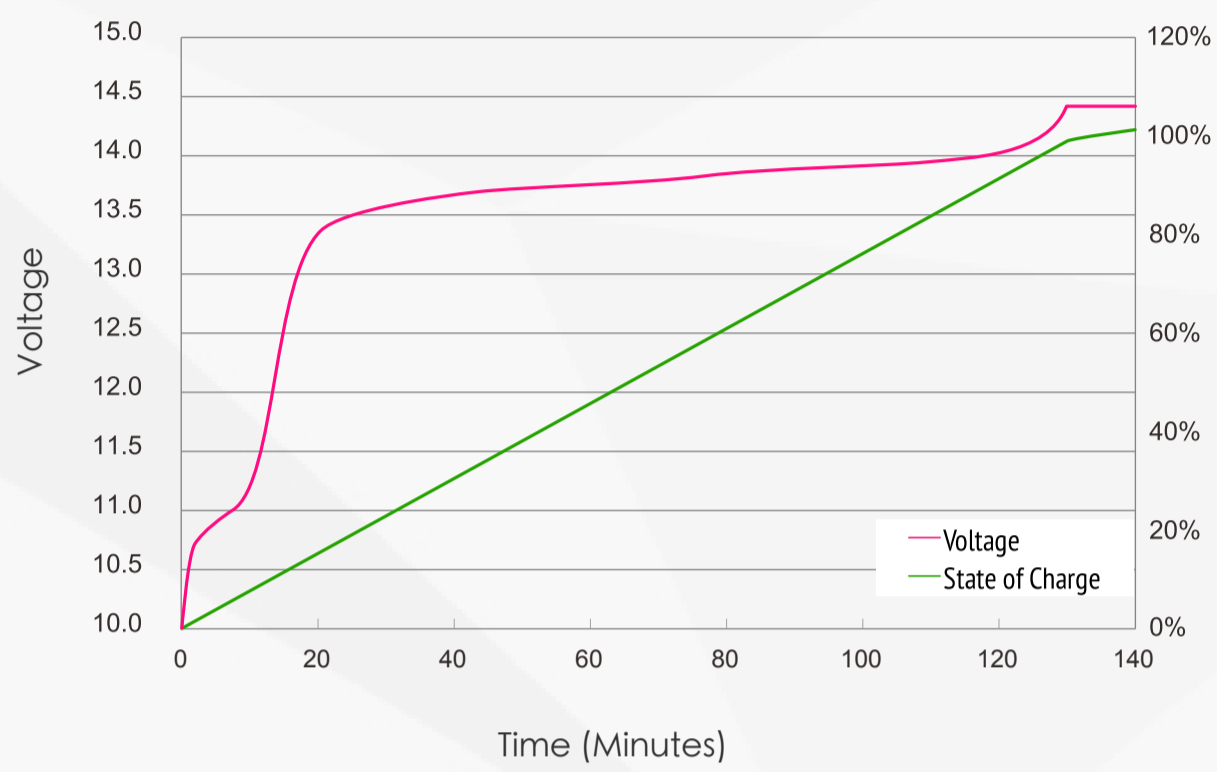
MPG24S-12106BT



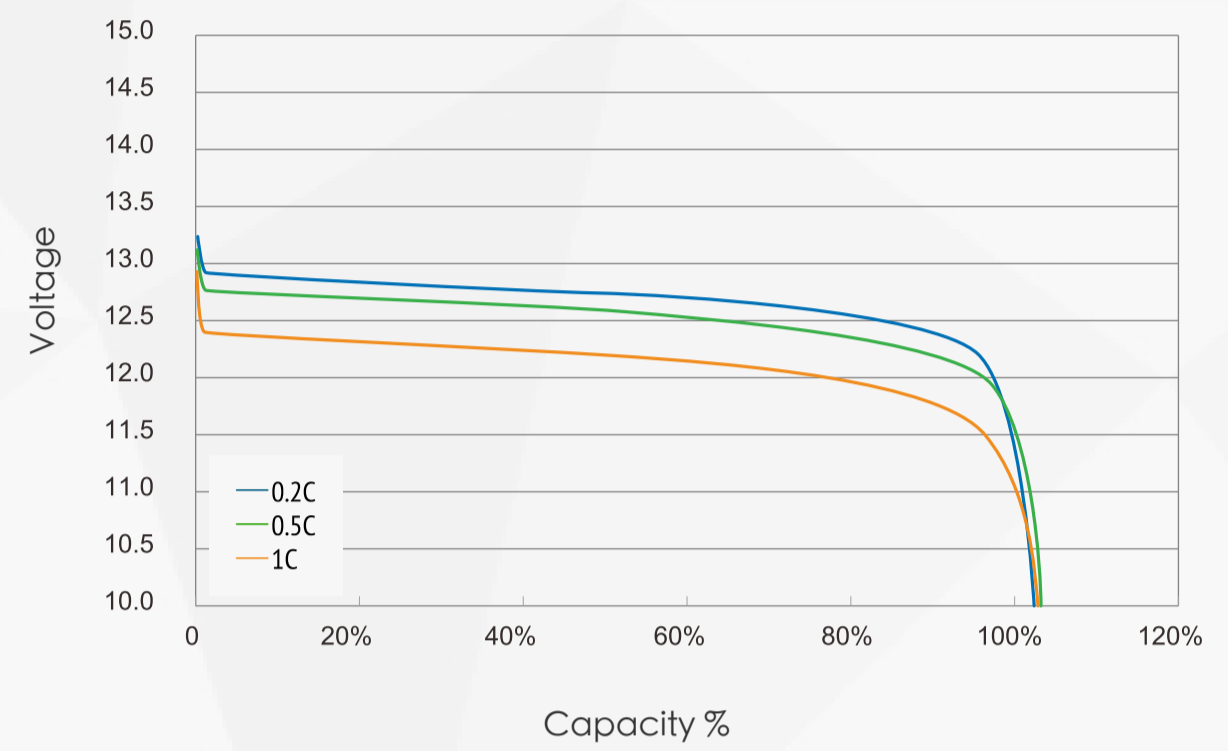
MPG24-12106

## Characteristics Curve:

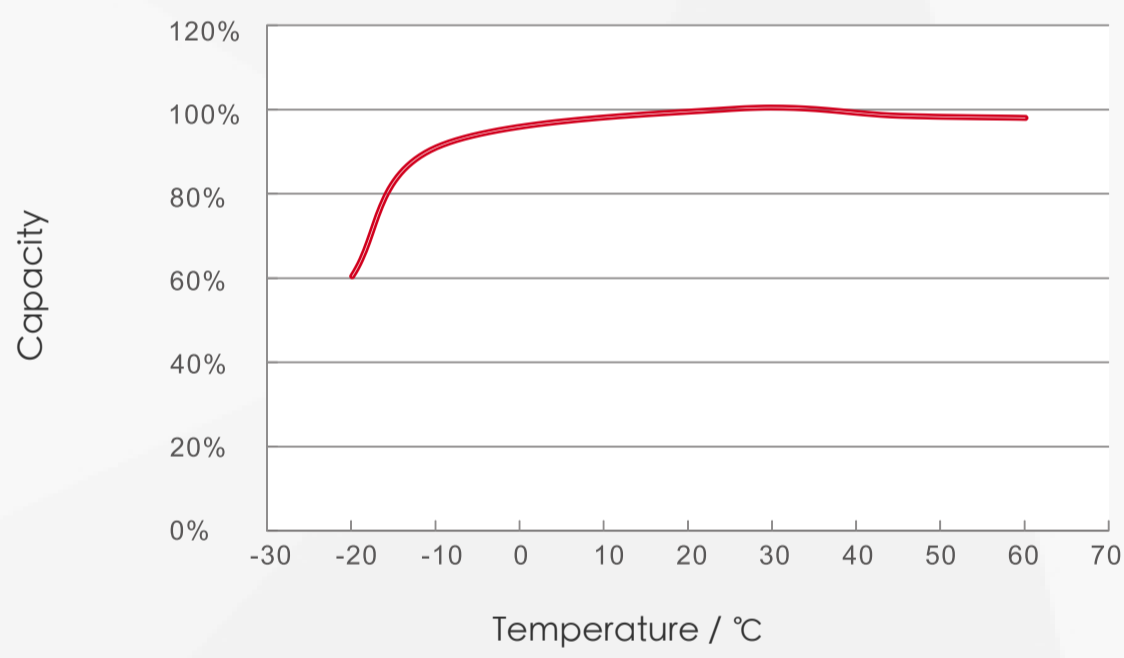
Charging Characteristics (0.5C @25°C)



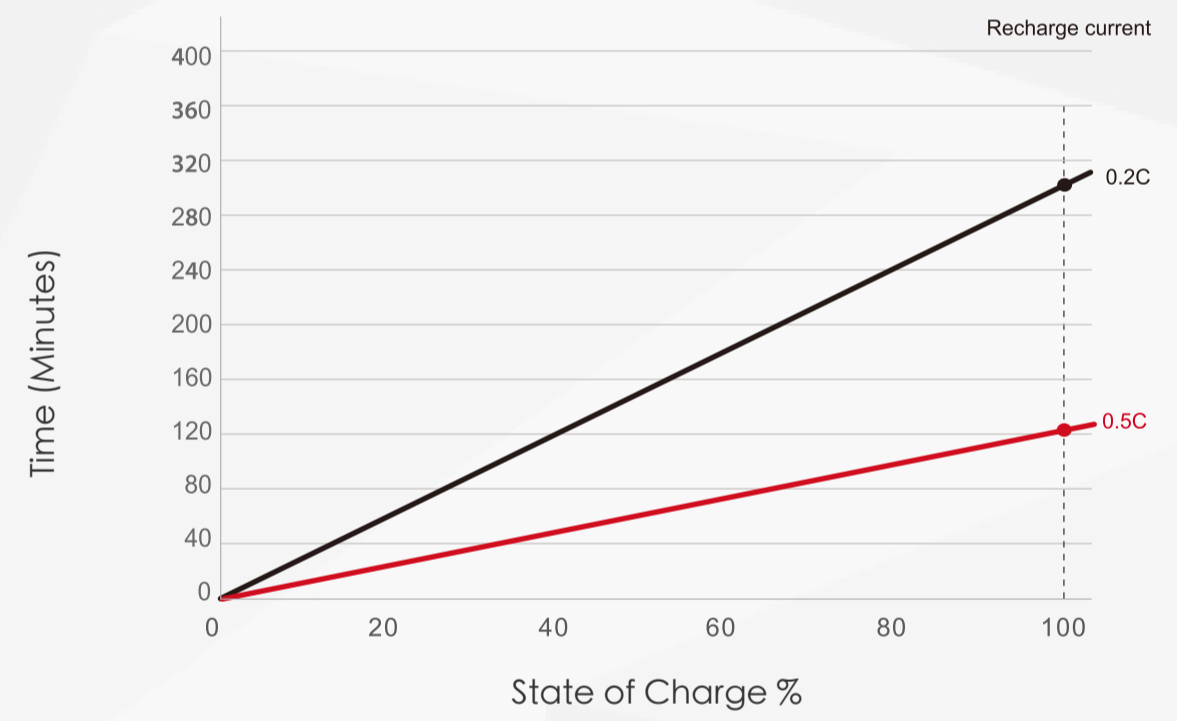
Discharging Characteristics (0.2C, 0.5C, 1C @25°C)



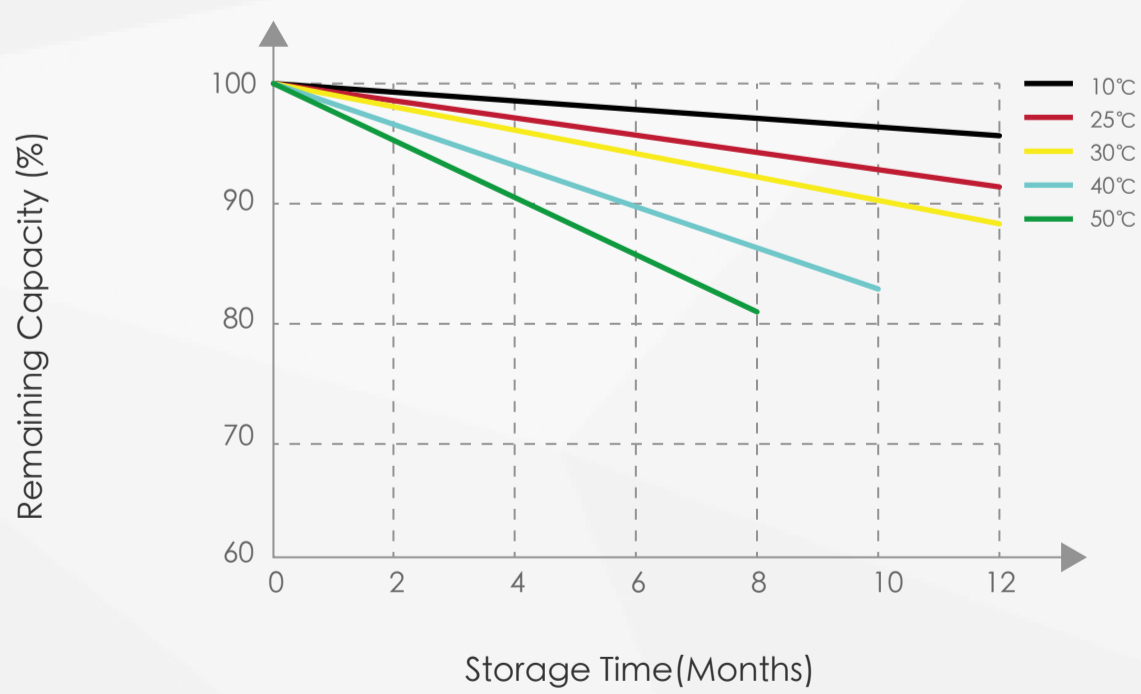
Different Temperature Capacity Curve



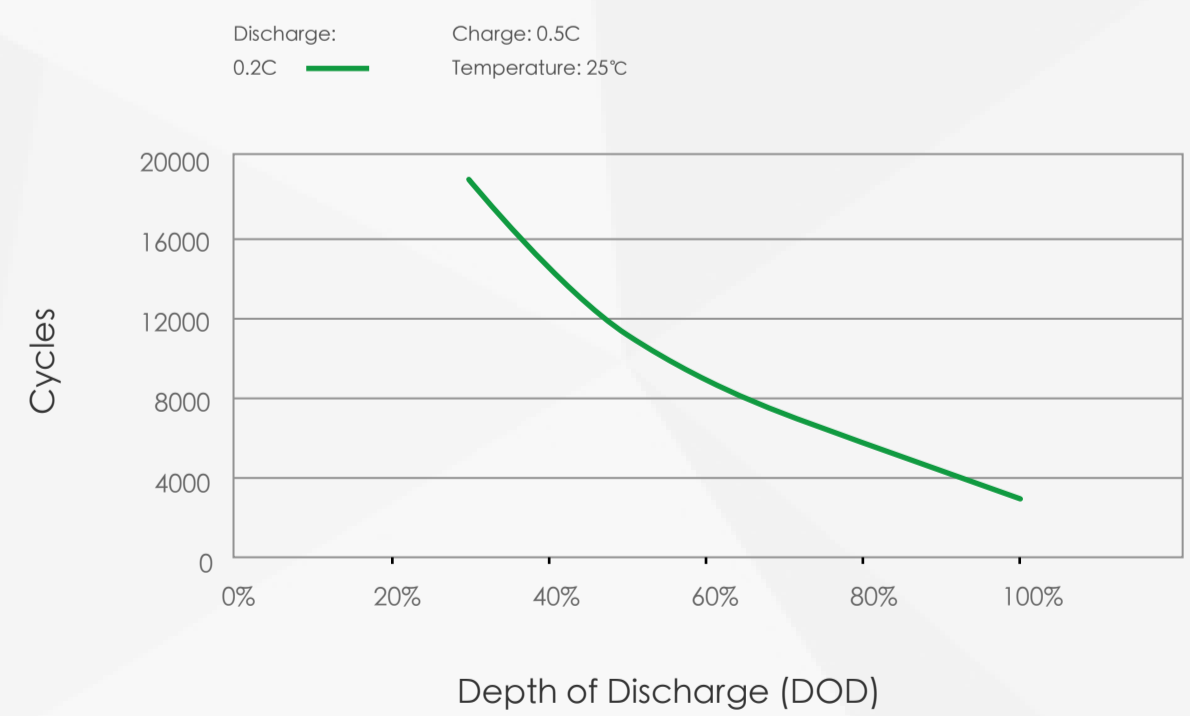
Typical Charge Time Curve



Different Temperature Self Discharge Curve



Different DOD Discharge Cycle Life Curve



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## Bluetooth App:

- Bluetooth app for Android and IOS
- Monitor the battery status.



## Distributor:

BRUENECH AS

Org. nr. NO 984 874 294 MVA

web: makspower.no

tel: +47 913 74 100

e-mail: sales@makspower.no

## Key Benefits:

- Higher qualified cylindrical cell:  
UL1973, UL9540, IEC62133, IEC62619 listed with Cycle life more than 3000times and excellent consistency.
- Bluetooth:  
can monitor the battery status(charge, discharge, current, temperature, cycle life and so on) and change the data for different applications.
- Higher energy density with less weight:  
The 3.2V106Ah prismatic cell which be used in these two model is with energy density 169wh/kg, about 15% higher than others, which bring less weight.

## Market Applications:



RV



Marine



Golf cart



Cleaning



Light EV



Energy storage



Robotics



Lighting

## Package:

20' Container=10Pallets=900Cartons=900Units;

40' Container=20Pallets=1800Cartons=1800Units;



Internal Package  
Forming pearl foam



1Carton=1Unit

Weight: 11Kg/carton  
Size(LxWxH): 320x230x282mm



1Pallet=90Cartons

Weight: 1005Kg/pallet  
Size(LxWxH)=1.2x1x1.8m ≈ 2.2BM