



CMLB-51.2-100 CMLB-51.2-230

LITHIUM IRON PHOSPHATE (LIFEPO4) BATTERY

PRODUCT KEY FEATURES

- 👑 High-performance LFP single cell with long life and wide temperature range
- 👑 Compact, lightweight design with high energy density
- 👑 Built-in BMS for monitoring voltage, current, and temperature
- 👑 Fire-redundant wiring and laser welding for enhanced safety
- 👑 LED indicator for SOC and operational status
- 👑 CAN or RS485 communication for seamless inverter integration
- 👑 15 years, designed service life
- 👑 Flexible customization of dimensions
- 👑 Customizable dimensions and maintenance-free operation
- 👑 LCD display for real-time battery data (voltage, temperature, SOC)



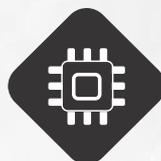
Integrated



Safe



Smart



Versatile



BMS

Battery Management System



User-friendly



Easy Installation



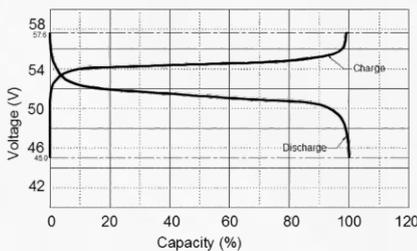
Technical Data

Model	CMLB-51-100-WM	CMLB-51-230	
Nominal voltage (VDC)	51.2	51.2	
Nominal capacity (kwh)	5.12KW	11.77KW	
Usable capacity (Kwh)	5.12KW	11.77KW	
Dimension, W*D*H (mm)	445*580*178	455*740*234	
Weight (kg)	52	99	
Depth of discharge	95%	95%	
Charge / discharge (A)	(Normal)	50A	100A
	(Max.)	100A	200A
	(Peak)	>115A (1s), ≥120A (Delay 1s) ≥200A (Delay 1s)	>210A (1s), ≥220A (Delay 1s) / ≥300A (Delay 1s)
Voltage	(Max.)	56.8V	56.8V
	Low Cut off	44.0V	44.0V
Communication port	RS485, CAN	RS485, CAN	
Cell in single string quantity (pcs)	16	16	
Working temperature / (C) charge	0C ~ 60C	0C ~ 60C	
Working temperature / (C) Discharge	>-10C ~ <65	>-10C ~ <65	
Storage temperature	-20C ~ 55C	-20C ~ 55C	
Short circuit current/ Duration time (A)	1000A 0.3ms	2000A 0.3ms	
IP rating	IP-30 (dustproof)	IP-30 (dustproof)	
Humidity (RH)			
Altitude (m)	< 2000m	< 2000m	
Designee life (@25 C)	15 Years	15 Years	
Cycle life (@25 C)	>6000 times, 0.5C, 95%DOD	>6000 times, 0.5C, 95%DOD	
Status instigators	LCD, LED level	LCD, LED level	
Protections	Over discharge, Over voltage, Over temperature	Over discharge, Over voltage, Over temperature	

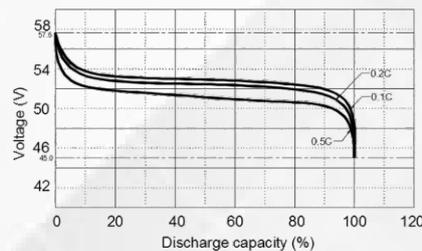
Product specifications are subject to change without further notice.

BATTERY MODULE PERFORMANCE CURVE

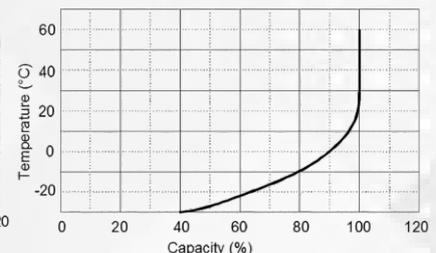
Charge & Discharge curve with 0.5C @ 25°C



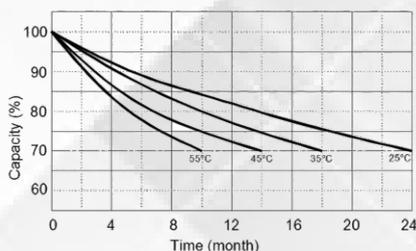
Discharge performance with different rate @ 25°C



Discharge capacity with different temperature @ 0.5C



Self-discharge @ different temperature



Cycle life with DOD@0.5C, 25°C

