Residential energy storage Battery (rack mountable) LFELI-48100MB16

Product Introduction

LFeLi-48100MB16 Intra-system balancing
Flame retardant system to UL94V-0.
Good high temperature performance
Safe Lithium Iron Phosphate Technology
Thousands of cycles, under normal conditions
High energy density and conversion efficiency
Environmental Friendly, without any heavy metals
Complete with Battery Management System built-in
Can use most standard VRLA chargers for this system
Low self discharge rate of 2 years before required recharging
Easy installation, can be in 19-inch standard cabinet or be wall-mounted
Built-in automatic protection for over-charge, over-discharge & over-temperature conditions

Characteristics

- High energy density and conversion efficiency
- Intelligent software anti-theft design
- Compatible with many inverters
- Easy maintenance with SOC (charge status) and SOH (health status)detection

Specification

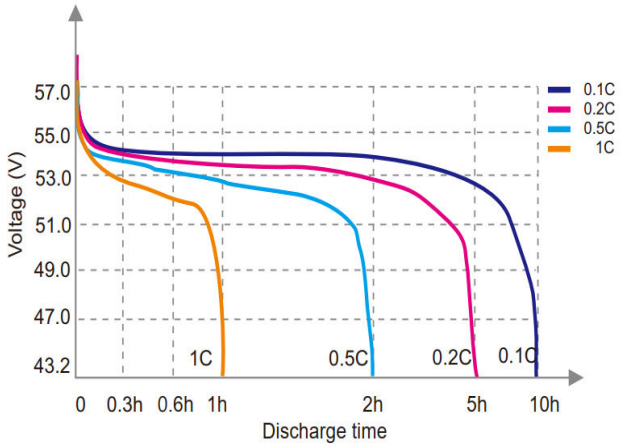
Items		Parameters
basic parameter	Specifications and models	LFeLi-48100MB16
	Nominal voltage	51.2V(43.2V-57.6V) [16Cells]
	Nominal capacity	100Ah (5120W) @ 0.5C, 25ºC
	Maximum continuous charge/ discharge current	100A/100A @ 25ºC
	Recommended charge setting	In the constant current stage, the charging voltage is cut off to 56.4V; Float charge constant voltage stage, the voltage is set to 54.5V; Cut-off voltage 56.4V, plus or minus 0.5V
	Weight	42kg
	Dimensions(W×D×H)（inch）	442mm×465mm×177mm（17.40*18.31*6.97）
	Cycle life	5000 Cycles @ 25ºC 0.5C,80% DOD；3500 Cycles @ 25ºC 0.5C,100%DOD；
	Number of parallel connections supported	16
	Self-discharge (month)@25ºC	≤3%
	BMS communication types	RS485; RS232; CAN
	Cooling Mode	Free cooling
	IP Class	IP30
	Display Fuction	LCD display screen，support English
	Design Life	15 years
	Shell Material	Q235A
	Certification（Program）	CE UN38.3 IEC

Items		Parameters
Environment	Storage Temperature	-40°C to 60°C
	Transport Temperature	-40°C to 60°C
	Operate Temperature	charge:0°C to 45°C; discharge: -10°C to 55°C（45°C Load reduced）
	Relative Humidity	5% to 95%
	Working Pressure	76kPa~106kPa

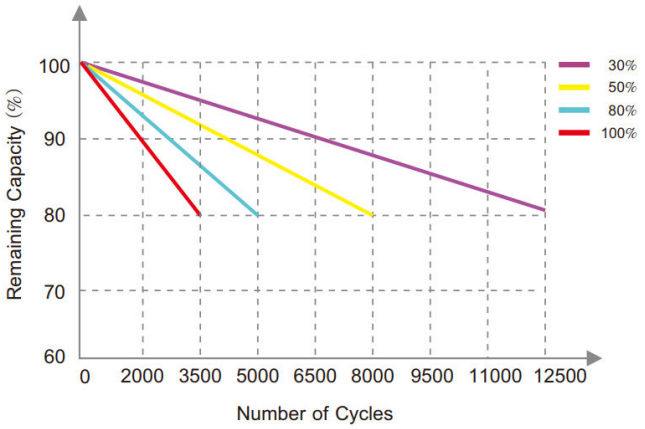
Note: When the battery pack needs to be stored for a long time, please charge the battery pack to about 50% power, and cycle the standard charge/discharge current at least once every month, and every three months.The battery should be activated once every three months with a small current (0.1C). Environmental requirements: temperature 0°C~35°C, relative humidity 45%~85%, atmospheric pressure 70kPa~106kPa.Place in dry and ventilated place, avoid contact with corrosive substances, keep away from fire and heat source.

Discharging Diagram					
Time（h）	1h	2h	3h	5h	10h
Constant Current（A）	100A	50A	33A	20A	10A
Constant Power（W）	5120W	2560W	1690W	1024W	512W

Discharge time curves at different rates @ 25°C



Different DOD Discharge Cycle Life Curve（0.5C）



Matching Inverters

No.	Manufacture		Type	COM
1	Deye	Deye 德业	Pylon RS485 LV-BPC V3.5-2019.08-07, Pylon CAN 2022.05-10	RS485/CAN
2	Growatt	Growatt	Growatt RS485 Modbus V2.01-2019.02.13	RS485
3	Voltronic	Voltronic Power	Voltronic inverter and BMS 485 communication protocol20191220	RS485
4	Bluesun	BLUESUN	Pylon RS485 LV-BPC V3.5-2019.08-07	RS485
5	Luxpower	LUXPOWER TEK	Luxpowertek RS485 inverter V0.3-2020.07.06	RS485
6	SMK	SMK SOLAR 斯盛科新能源	（锂电协议GT版）A08 RS485 inverter V1.0-2022.12	RS485
7	Srne	SRNE 硕日	WOW-protocol-V1.3-2017.06.27	RS485
8	SMA	SMA	SMA CAN V2.0	CAN
9	Must	MUST 美世乐	Must CAN PV1800F	CAN
10	Schneider	Schneider Electric	Schneider CAN 2019.07	CAN
11	Magerevo	MEGAREVO	REVO series low voltage battery BMS communication protocol (V1.02)	CAN
12	Goodwe	固德威 GOODWE	Goodwe CAN inverter LV V1.7-2020.02.28	CAN
13	Victron	victron energy	Victron CAN 2017.07.27	CAN

Installation options

Cabinets&wall-mounted brackets avaliable