SUNGROW
Clean power for all

NEW

MBL050 / MBL120 / MBL160

Long lifespan

- Up to 8,000-cycle lifespan ensures reliable, long-term use

Safety

- High-safety LFP battery
- Supports up to 5 types of safety detection

Flexibility

- Supports parallel connection of 2 to 20 modules, scalable up to 320 kWh

Easy Installation

- Touchscreen for easy operation
- Equipped with wheels for effortless transport[1)]



Technical properties	MBL050	MBL120	MBL160
System Data			
Battery type	LiFePO4		
Nominal energy	5.12 kWh	11.8 kWh	16.08 kWh
Battery cycles[2)]	6000	6000	8000
Nominal voltage	51.2 V		
Voltage range	44.8 V – 57.6 V		
Nominal charging / discharging current	50 A / 50 A	115 A / 115 A	157 A / 157 A
Max. charging / discharging current	100 A / 100 A	230 A / 230 A	200 A / 200 A
Peak charging (1s) / discharging current (3s)	110 A / 150 A	250 A / 300 A	210 A / 300 A
Min. discharging current	2 A		
Communication			
Display	LCD touchscreen		
Language	Chinese, English, Arabic, French		
Display Parameters	SOC, Pack voltage, Pack current, Charging / Discharging status		
Communication interface	CAN / RS485		
Protection			
Over / under voltage protection	Yes		
Over current protection	Yes		
Over / under temperature protection	Yes		
DC breaker	Yes		
General Data			
Dimensions (W * H * D)	494 * 513 * 155 mm	432 * 715 * 243 mm	432 * 855 * 243 mm
Weight	47.5 kg	86.5 kg	114.2 kg
Degree of protection	IP20		
Mounting method[1)]	Floor-mounted (Build-in casters) or Wall-mounted		
Installation location	Indoor		
Operating ambient temperature range	Charge : 0 to 55 ℃ (32 ℉ to 131 ℉) Discharge : -20 to 55 ℃ (-4 ℉ to 131 ℉)		
Allowable relative humidity range	5% to 95% (non-condensing)		
Storage condition	6 months @ 25 ℃; 3 months @ 35 ℃; 1 month @ 45 ℃		
Max. operating altitude	2000 m		
Cooling method	Natural convection		
Max. parallel units	20		
Certification	CE, IEC 62619, IEC 62477, UN 38.3, MSDS, RoHS		
Compatible inverters	MG5 / 6 / 8 / 10 / 12RL		

1) Wall mounting only for MBL050. MBL120 and MBL160 require additional wall mounting accessories.

2) Life cycle test conditions: 90% DOD, 0.5C charge & discharge at 25°C.

© 2026 Sungrow Power Supply Co., Ltd. All rights reserved. Subject to change without notice. Version 4 MEA