



Mango Power M

Backup Your Entire House Safely

**Power for All.
Even HVAC.**

20kWh battery capacity.
Expandable up to 80kWh.

12kW AC Output.
Expandable up to 120kW.

Powers HVAC and other
high wattage appliances.

**CATL's LFP Battery.
No Fire.**

The best battery in the
industry. Totally safe.

6,000 life cycles. Can be used
for 20 years.

-4°F - 140.0°F Temperature
Resilience.

**5-in-one Inverter.
Less Trouble.**

Mango Power M Hybrid
Inverter integrated.

Solar system ready. No
additional boxes required.

Build-in ATS / AGS / RSD
Transmitter / Breakers.

Easily achieve power independence and enjoy power freedom under any circumstances.

Unlocking the Top 10 Advantages of Mango Power M

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|---|--|
|  <p>20kWh battery capacity.
Expandable up to 80kWh.</p> |  <p>12kW AC Output.
Expandable up to 120kW.</p> |
|  <p>Powers HVAC and other high wattage appliances.</p> |  <p>CATL LFP Battery with a 10-year Warranty. Ensuring Safety and High Quality.</p> |
|  <p>6,000 life cycles.
Can be used for 20 years.</p> |  <p>-4°F - 140°F
Temperature Resilience.</p> |
|  <p>Smart Control APP. Taking Control with Mango Power APP.</p> |  <p>Solar system ready. No additional boxes required.</p> |
|  <p>Build-in ATS / AGS / RSD Transmitter / Breakers.</p> |  <p>NEM 3.0 and other policies are ready. Export power to the grid.</p> |

System Allocation: 1 x M Hybrid Inverter, 4 x M Battery
System Size: 12kW/20kWh



Energy Storage



Providing Power During Outages



Sell Electricity to the Grid



Time-Based Peak Shaving



M Hybrid Inverter 12kW Parameters

Weight	119.9lbs (54.4kg)
Size	36.4x23.7x11.9in(925.6*606*301mm)

AC - On-Grid Power Parameters

Maximum continuous AC output power ¹	12000W/240V & 10400W/208V
Peak power ¹	24000W 500ms
Grid-tied power factor (adjustable)	0.8leading-0.8lagging adjustable
Nominal AC output voltage	120V/240V/208V
Voltage range	180V-270V
Maximum continuous AC current	50A
Nominal frequency	60Hz
Extended frequency range	55-65Hz
Maximum AC output over current protection	75A
Max efficiency	97.5%(PV to grid) 94%(battery to grid)
THDI	<3%
Cooling	Low noise Fans

AC - Backup Output Power Parameters

Maximum continuous AC output power ¹	12000W/240V & 10400W/208V
Peak power ¹	24000W 500ms
Nominal AC output voltage	120V/240V/208V
Voltage range	180V-270V
Maximum continuous AC current	50A
Nominal frequency	60Hz
Extended frequency range	55-65Hz
Maximum AC output over current protection	75A
Max efficiency	97.5%(PV to grid) 94.0%(battery to grid)
THDV	<3%
Bypass grid switching time	<20ms
Maximum AC output over current	200A

DC-PV Parameters

PV modules power	18000W
MPPT numbers	3 max power point trackers (two strings combined)
MPPT voltage range	120V-500V
Full power MPPT voltage range	230V-500V
Maximum input DC voltage	600V
Maximum input current	25/15/15A
Maximum DC input short circuit current	31/19/19A
MPPT efficiency	99.90%

M Smart Screen

WiFi Dongle	2.4G connection , 802.11b/g/n
Connection	HDMI
Screen Size	4.3 inches

M Battery 5kWh Parameters

Battery chemistry	World's best LFP battery powered by CATL
Capacity	From 15kWh/300Ah to 20Wh/400Ah with four M Battery packs
Battery DC voltage range	44V~60V
Max charging current	Super-fast continuous charging speed, up to 1C for battery pack. 250A for 15000Wh and 20000Wh
Max discharging current	250A (for at least 3 M Battery packs)
Roundtrip efficiency	97.00%
Weight	103.6lbs(47kg)
Size	22.9x5.2x15.2 inches (581x133x387mm)
Battery Working Temperature	Charging: 0°C~60°C (32°F~140°F) Discharging: -20°C~60°C (-4°F~140°F)
Life Span	6000 cycles (@25°C, +0.5C/-0.5C)

M Cabinet Parameters

Environmental category/UV expose rating	NEMA Type 4X/IP65 outdoor
Capacity	From 1~4 M Battery packs
Weight	114.2lbs (51.8kg)
Size	31.5x15.4x46.3in (800x390x1182mm)
Cabinet installation	M-slide-a-way for easy installation

Features and Certification

RSD/AFCI	PV rapid shut down integrated
Integrated disconnection	DC switch
Grid-following	Grid-tied
Grid-forming	Micro-grid
Certification	CA rule21 UL1741/IEEE1547/UL1973/UL1642/UL9540&UL9540A
Generator	Smart control by AGS (Auto Generator Start) 120V/100A, 240V/50A
Home backup	Whole and partial home backup
Smart control	MANGO POWER App download from APP Store or Google Play
System design	AC coupled and DC coupled
Grid type	120V/240V/208V Split-phase L1,L2,N,PE (single phase)
Inverter Working Temperature	-13°F to 140°F >113°F derating (-25°C to 60°C >45°C derating)
Size	36.4x23.7x11.9in (925.6*606*301mm) 31.5x15.4x46.3in (800x390x1182mm)
Weight	119.9lbs (54.4kg) for M Power Hybrid Inverter, 103.6lbs (47kg) for M Battery, 114.2lbs (51.8kg) for M Cabinet
Installation	Ground placed and slightly wall mounted
Noise	<50dB (Do not install Power M next to the wall of bedroom)
Environmental category/UV expose rating	NEMA type 4X/IP65 outdoor rated
Relative humidity	0%-100% (condensing)
Altitude	<2000m
Warranty	M Battery 10 years M Hybrid Inverter 10 years M Smart Screen 3 years

1. Power Factor(PF)=1

We reserve the right to make technical changes. The values, outputs, other technical data, images, and diagrams in this prospectus and in data sheets, advertisements, and other promotional documents are approximate guidelines in all cases where they have not been identified as binding.