

MANGO POWER M

The World's First All-In-One All-Scenario Household Energy System

Battery Capacity

20 kWh

(Up to 800kWh)

Continuous Power

12 kW

(up to 120 kW)

Peak Power

24 kW

(Continuous 500ms)

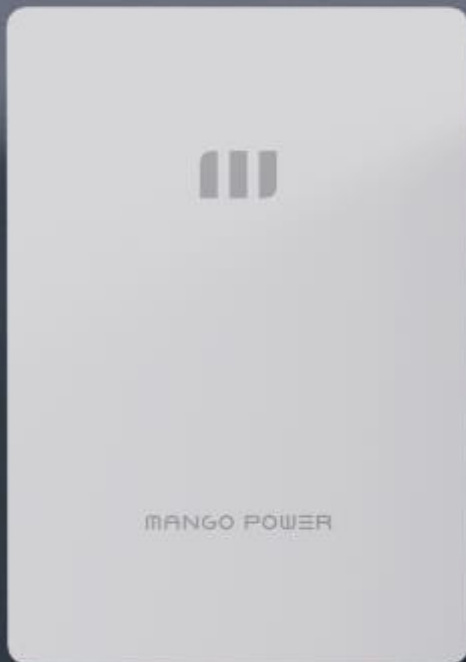
Chemistry

LFP

(Lithium iron phosphate)

Warranty

15 years



Entire Home
Backup



Pre-Wired to Reduce
Installation Costs



Integrated
Backup Gateway

The MANGO POWER M is designed with a built-in inverter and gateway, providing multi-user functionality that is perfectly suited to modern families. The device can be used for charging electric vehicles and a variety of both grid-tied or off-grid applications.

MANGO POWER M Spec Sheet

M Power Hybrid Inverter Parameters	
Weight	119.9lbs (54.4kg)
Size	36.4 x 23.7 x 11.9 inches (925.6 x 606 x 301 mm)
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)	0.8 leading - 0.8 lagging 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) 94.0% (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	99.9%
M Battery 5kWh Parameters	
Battery chemistry	World's best LFP battery powered by CATL
Capacity	From 15kWh/300Ah to 20kWh/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. 2500A for 15000Wh and 20000Wh
Max discharging current	250A (for at least 3 M Battery packs)
Roundtrip efficiency	97.0%
Weight	103.6lbs (47Kg)
Size	22.9 x 5.2 x 15.2 inches (581 x 133 x 387 mm)
Battery Working Temperature	Charging: 32°F~140°F (0°C~60°C) Discharging: -4°F~140°F (-20°C~60°C)
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	31.5 x 15.4 x 46.3 inches (800 x 390 x 1182 mm)
Cabinet installation	M-slide-a-way for easy installation
M Smart Screen	
WiFi Dongle	2.4G connection, 802.11b/g/n
Connection	HDMI
Size	6 x 4.7 x 2.3 inches (152.5 x 120.5 x 59 mm)
Screen size	4.3 inches
Features and Certification	
RSD/AFCI	PV rapid shut down integrated
Integrated disconnection	DC switch
Grid-following	Grid-tied
Grid-forming	Micro-grid
Certification	CA rule 21 UL1741/IEEE1547/UL1973/UL1642/UL9540&UL9540A
Generator	Smart control by AGS (Auto Generator Start) 10800W for generator, 120V Maximum 90A
Home backup	Whole and partial home backup
Smart control	MANGO POWER App downloaded from the 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	36.4 x 23.7 x 11.9 inches (925.6 x 606 x 301mm) for M Power Hybrid Inverter, 31.5 x 15.4 x 46.3 inches (800 x 390 x 1182mm) for M Cabinet
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
Relative humidity	0%-100% (condensing)
Altitude	<2000m
Warranty	15 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.