



MANGO POWER M is a universal, all-in-one intelligent power system compatible with AC-coupled solar power systems and DC coupling with new solar power modules. It can fulfill any on/off grid needs, providing a complete one-stop solution to household backup power. With its integrated, 12 kW hybrid inverter, combine input from photovoltaics, generators, and the grid simultaneously with ease.

Sporting a capacity range of 15 ~ 80 kWh, the world-leading lithium iron phosphate (LFP) batteries provided by CATL are safe and endurable, realizing efficient power distribution through intelligent load control to fulfill any and all backup power demands. In a commercial environment, you can superimpose up to 10 inverters to reach a total power of 120 kW. Through battery expansion, the system can support 100% power independency.

MANGO POWER M Features



Powerful

Enjoy backup power that lasts as long as you need it to with a battery capacity ranging from 12 - 120 kWh. Supports both AC-coupling for your existing solar systems and DC-coupling for newer solar modules. The sleek, modular design and intricate features make it an ideal companion in a modern household – powering up your entire home - or even your business.

An all-in-one system that offers an integrated solution - a built-in inverter, backup gateway, EV charger, and smart control for both AC-coupled existing solar and DC-coupled new modules. An internal AGS allows for generator connections, two 200A breakers, and direct 240V split-phase output are all supported without the need for an autotransformer. All necessary connection cables, including 2m 400A battery cables, are provided in the package.



Easy Installation



Affordable

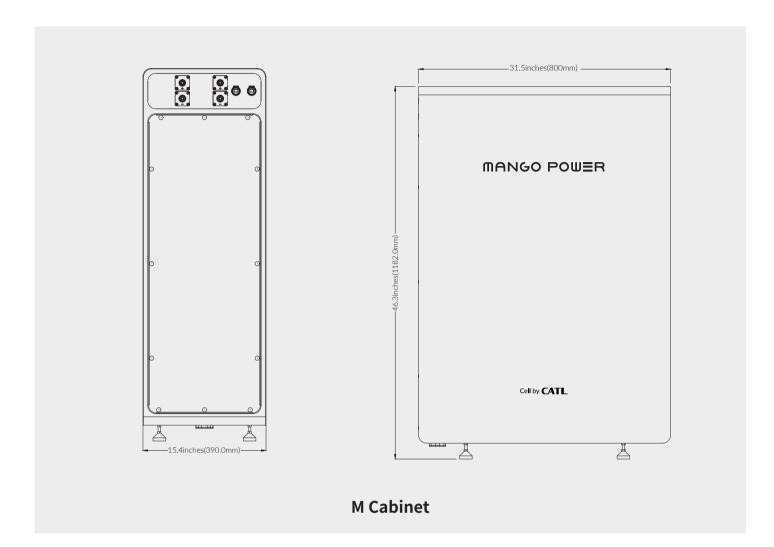
Say goodbye to fuel hikes and startling electricity bills. Utilize the MANGO POWER M with your solar power units to either power your own home or feed power back into the grid, earning on the excess you generate. Save money while you save the planet.

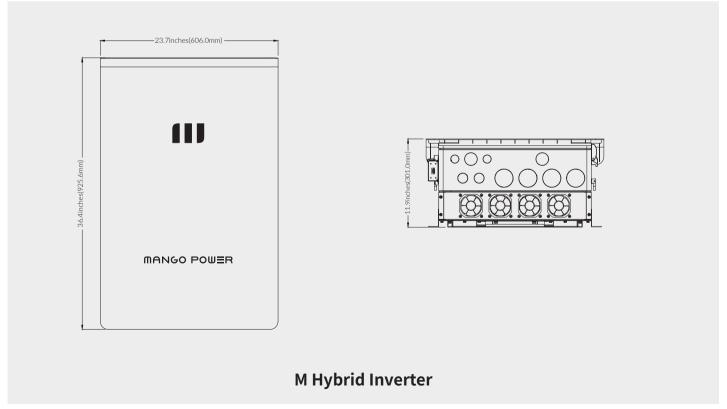
Powered by industry-leading LFP batteries from CATL, the Mango Power M provides secure, robust, and dependable energy. With enhanced battery charging speed and longevity, the integrated RSD Transmitter & AFCI all work in tandem to ensure a highly reliable, full home or business solution, with a 10-year warranty.



Reliable & Safe

MANGO POWER Product Dimensions





MANGO POWER M Specifications

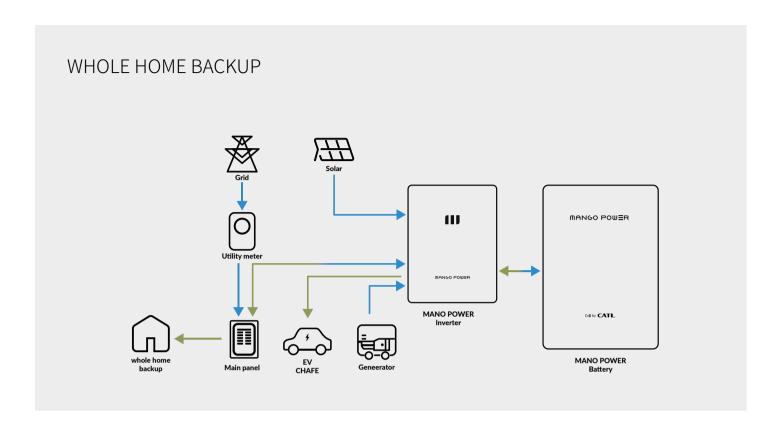
M Hybrid Inverter 12kW Parameters		
Weight	119.9lbs (54.4kg)	
Size	36.4x23.7x11.9in(925.6*606*301mm)	
	AC - On-Grid Power Parameters	
Maximum continuous AC output power ¹	12000W/240V &10400W/208V	
Peak power ¹	24000W 500ms	
Grid-tied power factor (adjustable)	0.8leading-0.8lagging adjustable	
Nominal 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	
33.33.1312	no money	

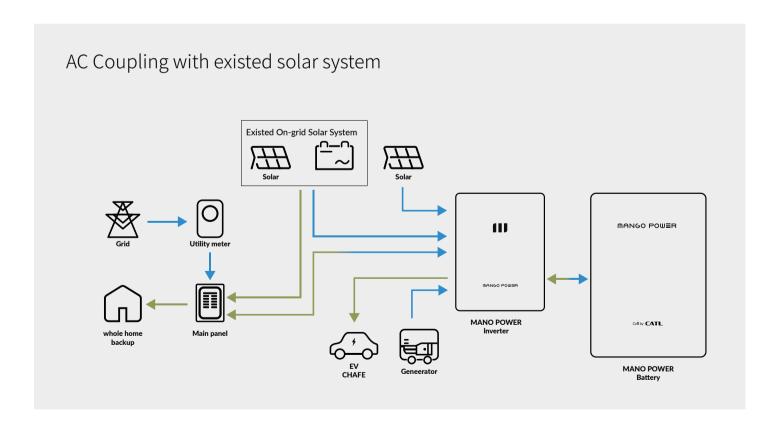
	M Battery 5kWh Parameters
Battery chemistry	World's best LFP battery powered by CATL
Capacity	From 15kWh/300Ah to 20Wh/400Ah with four M Battery packs
Battery DC voltage range	44V~60V
Max charging current	Super-fast continuous charging speed, up to 1C for battery pack. 250A for 15000Wh and 20000Wh
Max 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) 10800W for generator,120V/240V Maximum 90A
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
MANGO POWER M SYSTEM WARRANTY	10 Years from Installation date: System includes M Battery, M Inverter, M Cabinet
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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.

MANGO POWER M Configuration





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