

Micergy

ENERGY STORAGE SOLUTION

Affordable & Durable 12V/24V/48V Solar Energy Storage Solution

EASE | FANCY



Micergy

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Ease Series
(IP21, 2 Year Warranty)



Smart Load Management
By intelligently managing power distribution, the dual AC output allows you to ensuring the primary loads remain powered in the event of a grid outage. ensuring that critical loads are always powered, while optimizing overall energy usage and backup time.



Powerful with Enhanced Safety
Support up to 300% surge power with built-in power optimizer, which effectively drives heavy home loads and ensuring reliable performance for demanding appliances, the Built-in Transformer Isolation also brings enhanced safety.



Higher Solar Yield
Wider MPPT operation voltage range with more power generation, start earlier and stop later. Super high PV to Inverter efficiency plus bigger maximum PV input power increase the cost performance significantly.



Work without a Battery
When connected with PV, the hybrid inverter supports AC output without a battery, which lowers the initial cost of the solar power system and saves money right away, a battery can be added in later phase when required.

Hybrid Solar Inverter

1.2KW	3.6KW	5KW	5KW	6.5KW
12V	24V	24V	48V	48V



GENERAL SPECIFICATIONS		MCG-1220-IVT	MCG-3640-IVT	MCG-5040-IVT	MCG-5080-IVT	MCG-6580-IVT
	Rated Capacity	1500 VA / 1200 W	4500 VA / 3600 W	6250 VA / 5000 W	6250 VA / 5000 W	8120 VA / 6500 W
PV Input	PV Maximum Input Power	1200 Wp	6500 Wp	9000 Wp	6500 Wp	9000 Wp
	Max. PV Open Circuit Voltage	125 VDC	500 VDC	500 VDC	500 VDC	500 VDC
	MPPT Range Operating Voltage	20 ~ 100 VDC	40 ~ 450 VDC	40 ~ 450 VDC	120 ~ 450 VDC	60 ~ 450 VDC
	Max. Solar Input Current	14 A	18 A	28 A	18 A	28 A
Battery	Battery Type	Lithium / Lead-acid				
	Nominal Battery voltage	12 V (1*12 V)	24 V(2*12 V)	24 V (2*12 V)	48 V(4*12 V)	
AC Input	Nominal voltage	208 / 220 / 230 / 240; L + N + PE				
	Voltage Range	90 ~ 280 ±3 (Normal Mode); 170 ~ 280 ±3 (UPS Mode)				
	Frequency	50 / 60 Hz (Auto Adaptive)				
AC Output	Rated Output Power	1500 VA/1200 W	4500 VA / 3600 W	6250 VA / 5000 W	6250 VA / 5000 W	8120 VA / 6500 W
	Second Output Capacity	1380 VA/1200 W	2300 VA / 2300 W	4150 VA / 4150 W	4150 VA / 4150 W	4150 VA / 4150 W
	Surge Power	3600 VA	11000 VA	15000 VA	15000 VA	16500 VA
	Parallel	/	/	/	9 Unit (1P & 3P)	/
	Waveform	Pure Sine Wave				
	Nominal Voltage	208 / 220 / 230 / 240 VAC				
	Feed-in Grid Voltage Range	195 ~ 253 VAC				
	Nominal Frequency	50 / 60 Hz				
	Feed-in Grid Frequency Range	49 ~ 51 Hz ±0.1% / 59 ~ 61 ±0.1%				
	Transfer Time	10 ms UPS mode, 10 ms Appliance mode				
	Peak Efficiency (PV to INV)	94.00%	96.00%	96.00%	96.50%	97.00%
	Peak Efficiency (Battery to INV)	90.00%	92.00%	92.50%	93.50%	94.50%
	Overload Protection	10min@102%< Load<120% 1min@120%< Load <150% 10s@150%< Load<200% 200ms@Load >200%	1min@102%< Load <110% 10s@110%< Load <130% 3s@130%< Load <150% 200ms@Load >150%	1min@102%< Load <110% 10s@110%<Load <130% 3s@130%<Load <150% 200ms@Load>150%	1min@102%< Load <120% 10s@110%<Load <130% 3s@130%<Load <150% 200ms@Load>150%	10min@102%< Load <120% 1min@120%< Load <150% 10s@150%< Load <200% 5s@Load >200%
	Admissible Power Factor	-0.8 ~ +0.8				
Charger	Charging Voltage	FV Mode: 13.5 V (Settable: 12 ~ 14.9 V) CV Mode: 14.1 V (Settable: 12 ~ 15 V)	FV Mode: 27 V (Settable: 26.6 ~ 27.8 V) CV Mode: 28.2 V (Settable: 28 ~ 29 V)	FV Mode: 27 V (Settable: 26.6~27.8 V) CV Mode: 28.2 V (Settable: 28~29 V)	FV Mode: 54 V (Settable: 53.2 ~ 55.6 V) CV Mode: 56.4 V (Settable: 56 ~ 58 V)	
	Battery Over Voltage	15 V	30.5 V	30.5 V	61 V	
	Charging Current	2~ 60 A	2~ 100 A	2 ~ 160 A	2 ~ 80 A	2 ~ 120 A
	Max.AC Charge Current	60 A	100 A	160 A	80 A	120 A
	Max PV Charge Current	60 A	100 A	160 A	80 A	120 A
	Max. Charge Current (PV+AC)	60 A	100 A	160 A	80 A	120 A
Physical	Built-in Transfer	Yes	Yes	Yes	Yes	Yes
	Built-in Power Booster	Yes	Yes	Yes	Yes	Yes
	Dimensions(D*W*H, mm)	91 * 236 * 347mm	112 * 283 * 448.9mm	394 * 326 * 110mm	119 * 338 * 539.1mm	119 * 338 * 539.1mm
	Net Weight (Kg)	5.2kg	8.6kg	11.5kg	12.5kg	13.56kg
	Communication Interface	RS485 / RS232	RS485 / RS232 / USB / Dry Contact			
Environment	Ingress Protection	IP21				
	Operating Temperature Range	-10 °C - 50 °C				
	Storage Temperature	-15 °C - 60 °C				
	Humidity	5% ~ 95% (Non-condensing)				

* Product specifications are subject to change without further notice.



Ease Series

(IP21, 5 Year Warranty)



Patent Super Thin Design
By using Grade A LiFePO4 Blade Cell, the super-thin design brings greater energy density within a smaller space, it can be easily installed by wall-mounted or just put on the table, which well matches the house surroundings.



Lead Acid Replacement
The LiFePO4 battery cells are produced with a longer lifespan of 8000 cycles @0.5C, which lowers lifetime ownership cost significantly compared with the lead-acid battery.



Safest Battery
The blade cells incorporate features that significantly enhance their thermal stability and resistance to fire risk. The cells won't even catch fire when punctured or crushed.



Upgrade from Solar Home System
The 12.8V/2kWh Version designed with built-in 4*12V 5521 DC barrel jack port for 12V DC appliances like LED light, fan, TV etc. which seamlessly upgrade solar home system user with bigger battery capacity without wasting the DC appliances.



Smart BMS
The 51.2V/8kWh Version comes with smart BMS, which support up to 15 pcs in parallel for scalability and compatible with mainstream inverter brand.

Lithium Battery Pack

Energy	2kWh	4kWh	8kWh
Voltage	12.8V	25.6V	51.2V
Capacity	156Ah	156Ah	156Ah



GENERAL SPECIFICATIONS		MCG-1220-BAT	MCG-2440-BAT	MCG-4880-BAT
Nominal Energy		2 kWh	4 kWh	8 kWh
Electrical Performance	Nominal Voltage	12.8 V	25.6 V	51.2 V
	Nominal Capacity	156 Ah	156 Ah	156 Ah
	Operating Voltage Range	10 V - 14.6 V	20 V - 29.2 V	40 V - 58.4 V
	Cycling Performance	>8000 Cycle @ 0.5C, 25°C, 70% EOL		
Operating Parameters	Maximum Charging Current(A)	120 A	150 A	150 A
	Maximum Discharging Current(A)	120 A	150 A	150 A
	Charging Cut-off Voltage(V)	14.6 V	29.2 V	58.4 V
	Discharge Cut-off Voltage(V)	10 V	20 V	40 V
	Recommended Charging Current(A)	≤50A		
	Recommended Discharging Current(A)	≤50A		
	Humidity	0-95%		
	Altitude	≤2000m		
	Charging Temperature	0°C-65°C		
	Discharging Temperature	-20°C-65°C		
	Storage Temperature	-20°C-45°C, SOC:20%-50%		
Physical Parameters	Cell Type	LiFePO4 Blade Cell		
	Cell Capacity	3.2V/156 Ah		
	Product Dimension(W*H*D, mm)	1180*260*75mm	1180*260*95mm	1180*260*135mm
	Package Dimension(W*H*D, mm)	1250*355*130mm	1250*355*145mm	1250*355*180mm
	Net Weight (Kg)	26.5kg	38.5kg	73kg
	Gross Weight (Kg)	28.5kg	40.5kg	75kg
	Ingress Protection	IP21 (Indoor)		
	Installation	Wall-Mounted/Standing		
Communication	Communication	/	/	CAN, RS485
	Compatitible Inverter Brand	/	/	Micergy/Mainstream
	Display	LCD Screen	LCD Screen	2.8" Touch Screen
	Scalability	/	/	Max. 15pcs
Warranty	Warranty	5 Years	5 Years	8 Years
	Design Performance Life	15 Years		

* Product specifications are subject to change without further notice.



Fancy Series

(IP65, 5 Year Warranty)



More Yield
90V-425V wider MPPT operation voltage range brings more power generation, start earlier and stop later. Super high PV to Inverter efficiency plus bigger maximum 200% PV oversizing input increase the cost performance significantly.



Switching Time < 4ms
Fancy series inverter can switch from grid power to battery backup in 4ms during a power outage to prevent most sensitive electronics from shutting down or rebooting. Ensures a seamless transition.



User Friendly
User-friendly design combines colorful touch LCD display, intelligent interface, and convenient features that enhance the user experience for both installers and end-users. The WiFi connection is also great for users who want to monitor solar performance anytime, anywhere



IP65 Protection, 5 Year Warranty
Fancy Series hybrid solar inverter is dust-proof and water-resistant with an IP65 protection rating to ensure reliable operation, safety, and longevity in real-world conditions, especially in outdoor or semi-outdoor installations. Users can enjoy a worry-free 5-year warranty.

Hybrid Solar Inverter

6 KW

8 KW

10 KW

12 KW



GENERAL SPECIFICATIONS		MCG-HY06-IVT	MCG-HY08-IVT	MCG-HY10-IVT	MCG-HY12-IVT
	Rated Capacity	6600 VA / 6000 W	8800 VA / 8000 W	11000 VA / 10000 W	13200 VA /12000 W
PV Input	PV Maximum Array Power	12000 Wp	16000 Wp	20000 Wp	24000 Wp
	PV Maximum Input Power	9600 Wp	12800 Wp	16000 Wp	19000 Wp
	Max. PV Input Voltage	510 VDC			
	Start-up Voltage	80 VDC			
	MPPT Range Operating Voltage	90 ~ 425 VDC			
	MPPT Efficiency	> 99%			
	Max input Current per MPPT	18+18	28 + 28		
	Max. SCC per MPPT	27+27	42 + 42		
	No.of MPP Trackers	2	2		
	No.of String Per MPP Tracker	1+1	2+2		
Battery	Battery Type	Lithium / Lead-acid			
	Nominal Battery voltage	48 V			
	Voltage Range	40V -60V			
	Max. Current	135 A	190 A	210 A	220 A
AC Input	Nominal voltage	220 / 230Vac, L / N / PE			
	Frequency	50 / 60 Hz (Auto Adaptive)			
	Max Input Current	30 A	40 A	50 A	60 A
AC Output	Rated Output Power	6600 VA / 6000 W	8800 VA / 8000 W	11000 VA / 10000 W	13200 VA /12000 W
	Max Output Current	28.7 A	38.3 A	47.8 A	57.3 A
	Nominal Voltage	230V			
	Nominal Frequency	50 / 60 Hz			
	Parallel	10 Units			
	Transfer Time	< 4 ms, On/Off grid Switching Time			
	Peak Power (Off-grid)	2 Times of Rated Power, 60s			
	Peak Efficiency	97.60%			
	Admissible Power Factor	~1 (-0.8lagging - 0.8leading)			
	Inverter Topology	Transformerless for PV side / HF for Battery Side			
	Surge Protection Level	TYPE II(DC), TYPE II(AC)			
Physical	Dimensions(D*W*H, mm)	411 * 631 * 236 mm			
	Net Weight (Kg)	28.6 kg	28.6 kg	30 kg	31 kg
	Cooling	Intelligent Air Cooling			
	Communication Interface	LED + LCD / CAN, RS485, CT, NTC, WiFi			
	Ingress Protection	IP65			
	Noise (dB)	< 45			
	Operating Temperature Range	-25 to +60°C, >45°C Derating			
	Storage Temperature	-25 °C -70 °C			
	Altitude (m)	< 3000m			
	Humidity	5% ~ 95% (Non-condensing)			

* Product specifications are subject to change without further notice.



Fancy Series
(IP21, 10 Year Warranty)



WM-100, 51.2V/100Ah

SK-150, 51.2V/600Ah

CB-280, 51.2V/280Ah

SD-150, 51.2V/600Ah



Multi-Layer Protection System

By using Grade A LiFePO4 Blade Cell and Smart BMS, the battery pack adopts multi-layer safety mechanism from cell to pack level, ensuring the overall safety for household and businesses.



Smart BMS

Smart BMS ensures battery health and performance by constantly monitoring voltage, temperature, state-of-charge (SoC), and state-of-health (SoH), plus over-voltage/under-voltage protection, temperature regulation for early intervention.



Lower Lifespan Cost

Low degradation over time (around 70% capacity retention after 8000 cycles), the battery packs reduce the need for replacements like lead acid battery, leading to lower total cost of ownership (TCO)

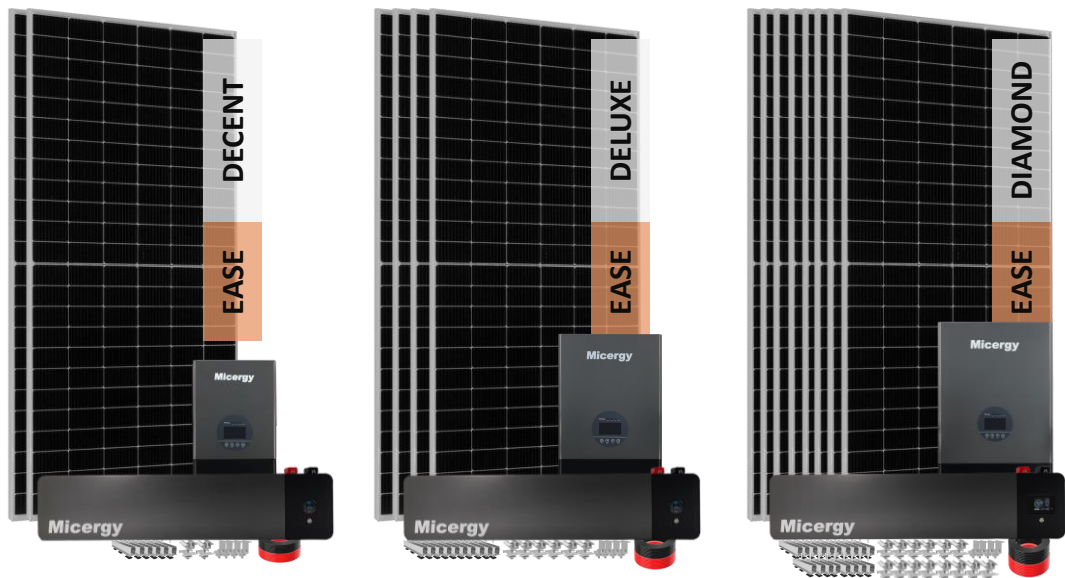


Patent Robust Design

Battery packs are built to withstand extreme environments with patent nice design, especially the super-thin design with blade cells brings greater energy density within a smaller space, it can be easily installed by wall-mounted or just put on the table, which well matches the house surroundings.

GENERAL SPECIFICATIONS		MCG-WM-100-BAT	MCG-SK-150-BAT	MCG-CB-280-BAT	MCG-SD-150-BAT
Nominal Energy		5.12 kWh	30.72 kWh	14.33 kWh	30.72 kWh
Electrical Performance	Nominal Voltage	51.2 V			
	Nominal Capacity	100 Ah	600 Ah	280 Ah	600 Ah
	Operating Voltage Range	44.8 V - 58.4 V			
	Cycling Performance	>8000 Cycle @ 0.5C, 25°C, 70% EOL			
Operating Parameters	Maximum Charging Current(A)	100 A	100 A	200 A	200 A
	Maximum Discharging Current(A)	100 A	100 A	200 A	200 A
	Charging Cut-off Voltage(V)	44.8 V			
	Discharge Cut-off Voltage(V)	58.4 V			
	Recommended Charging Current(A)	< 50 A	< 50 A	< 100 A	< 100 A
	Recommended Discharging Current(A)	< 50 A	< 50 A	< 100 A	< 100 A
	Humidity	0-95%			
	Altitude	≤2000m			
	Charging Temperature	0°C-65°C			
	Discharging Temperature	-20°C-65°C			
	Storage Temperature	-20°C-45°C, SOC:20%-50%			
	Cell Type	LiFePO4 Prismatic Cell	LiFePO4 Blade Cell	LiFePO4 Prismatic Cell	LiFePO4 Blade Cell
Physical Parameters	Cell Capacity	100 Ah	150 Ah	280 Ah	150 Ah
	Product Dimension(W*H*D, mm)	455 * 542 * 172	1030*413.5*156.5	647.7 * 1181.1 * 381	1100 * 687.2 * 111.8
	Net Weight (kg)	50 kg	300 kg	135 kg	300 kg
	Ingress Protection	IP21 (Indoor)			
	Installation	Wall-mounted	Stackable	Standing	Standing
Communication	Communication	CAN, RS485			
	Compatible Inverter Brand	Micergy, Deye, Pylon, Voltronic, Growatt, SRNE, Luxpower, Goodwe etc...			
	Display	2.8" Touch Screen, LED Indicators			
	Scalability	Max. 15pcs in Parallel with Automatic Addressing Function			
Warranty	Warranty	10 Years			
	Design Performance Life	20 Years			

* Product specifications are subject to change without further notice.



MICERGY EASE SERIES SOLAR ENERGY STORAGE COMBO CONFIGURATION				
CONFIGURATION		DECENT	DELUXE	DIAMOND
Hybrid Solar Inverter		MCG-1220-IVT, 12V/1.2KW	MCG-3640-IVT, 24V/3.6KW	MCG-6580-IVT, 48V/6.5KW
Lithium Battery Pack		MCG-1220-BAT, 12.8V/156Ah	MCG-2440-BAT, 25.6V/156Ah	MCG-4880-BAT, 51.2V/156Ah
Solar Panel		550Wp * 2 pcs	550Wp * 4 pcs	550Wp * 8 pcs
Solar Cable		4mm², Red 15m 4mm², Black 15m	4mm², Red 20m 4mm², Black 20m	4mm², Red 30m 4mm², Black 30m
Aluminum Mounting		Mini-Rail * 6 pcs Middle Clamp * 2 pcs End Clamp * 4 pcs	Mini-Rail * 10 pcs Middle Clamp * 6 pcs End Clamp * 4 pcs	Mini-Rail * 18 pcs Middle Clamp * 14 pcs End Clamp * 4 pcs
Combo Highlights	Daily Solar Power Generation	4.95kWh - 7.15kWh	9.9kWh - 14.3kWh	19.8kWh - 28.6kWh
	Fully Charged Battery Capacity	2kWh	4kWh	8kWh
	Continuous AC Power Output	1.2KW	3.6KW	6.5KW
	Application Tips	Ease Decent Combo with 1.1KWp Solar Panel, 2kWh LiFePO4 battery and 1.2KW inverter, it's a 12V system designed for lead acid battery replacement and solar home system upgrade, which can meet the daily power demand of essential loads like home light, fan, TV, freezer and water pump etc.	Ease Duluxe Combo with 2.2KWp Solar Panel, 4kWh LiFePO4 battery and 3KW inverter, it's a 24V system designed for lead acid battery replacement, unstable grid and off-grid scenario, which can meet not only the daily power demand of essential loads, but also some inductive load like Aircons.	Ease Diamond Combo is composed of 4.4KWp Solar Panel, 8kWh LiFePO4 battery and 6.5KW inverter, it's a 48V system designed for high-demanding, unstable grid and off-grid household, which can meet the power demand of almost all loads in a typical household. The battery also supports scalability up to 15 pcs for higher power demand.

* Daily Solar Power Generation is based on solar irradiation level of 4.5–6.5kWh/kWp, actual power generation based on weather conditions.

* The configuration is for reference only and can be customized as per load profile and preference.



MICERGY FANCY SERIES SOLAR ENERGY STORAGE COMBO CONFIGURATION				
CONFIGURATION		DECENT	DELUXE	DIAMOND
Hybrid Solar Inverter		MCG-HY06-IVT, 48V/6KW	MCG-HY08-IVT, 48V/8KW	MCG-HY12-IVT, 48V/12KW
Lithium Battery Pack		MCG-WM-100-BAT, 51.2V/100Ah	MCG-CB-280-BAT, 51.2V/280Ah	MCG-SD-150-BAT, 51.2V/600Ah
Solar Panel		550Wp * 8 pcs	550Wp * 16 pcs	550Wp * 32 pcs
Solar Cable		4mm², Red 30m 4mm², Black 30m	6mm², Red 40m 6mm², Black 40m	6mm², Red 50m 6mm², Black 50m
Aluminum Mounting		Mini-Rail * 18 pcs Middle Clamp * 14 pcs End Clamp * 4 pcs	Mini-Rail * 36 pcs Middle Clamp * 28 pcs End Clamp * 8 pcs	Mini-Rail * 72 pcs Middle Clamp * 56 pcs End Clamp * 16 pcs
Combo Highlights	Daily Solar Power Generation	19.8kWh - 28.6kWh	39.6kWh - 57.2kWh	79.2kWh - 114.4kWh
	Fully Charged Battery Capacity	5.12kWh	14.33kWh	30.72kWh
	Continuous AC Power Output	6KW	8KW	12KW
	Application Tips	Fancy Decent Combo composed of 4.4KWp Solar Panel, 5kWh LiFePO4 Battery, and 6KW Inverter, which is best for small households, light commercial use, backup applications, enjoy lower monthly electricity bills, peace of mind during power outages, and long battery lifespan with LiFePO4 safety & performance	Fancy Deluxe Combo composed of 8.8KWp solar panel, 14kWh LiFePO4 battery and 8kW inverter, which is best for medium and large families, small businesses (such as B&Bs, cafes), power supply for high-energy-consuming equipment, the combo brings high power generation and energy storage capacity.	Fancy Diamond Combo composed of 17.6kWp solar panel, 30kWh LiFePO4 battery and 12kW inverter, which brings industrial-grade reliability and best for enterprises, off-grid communities or infrastructure projects that requiring high power output.

* Daily Solar Power Generation is based on solar irradiation level of 4.5–6.5kWh/kWp, actual power generation based on weather conditions.

* The configuration is for reference only and can be customized as per load profile and preference.