



MHELIOS

Midea MHELIOS Flex - H Energy Management System (Single-Phase)



Midea MHELIOS Flex - H
Single-Phase Hybrid
Inverter

Midea MHELIOS Flex - H
Low Voltage Energy
Storage

About Midea

Midea Group is a Fortune 500 company, with robust business growth across multiple sectors. We believe in humanizing-technology and provide customized solutions for smart home appliances, electro-mechanical, building technologies, robotic&automation and digital innovation.

#278

2023 Fortune
Global 500

#199

2023 Forbes
Global 2000

#36

Brand Finance 2022
Top 100
Most Valuable Tech Brands

200+

Countries & Regions of
Operation

A/A3/A

S&P/Moody's/Fitch
Credit Ratings

160,000+

Employees

31

R&D centers
in 12 countries
all around the world

40

Production centers
in 14 countries
all around the world



Residential Energy Management Solutions for Single-Phase Grid Scenario



Midea MHELIOS Flex - H Single-Phase Hybrid Inverter

EH Series



- Smart Energy Management:**
 - Free solar energy to power the air-conditioner avoiding electricity anxiety
 - Eliminate unnecessary additional costs with smart home scene control
- Flexible Application:**
 - Supports multiple parallel systems with more solutions (up to 6 units)
 - Meets PV only installation, battery added and compatible with existing PV system scenarios
- Outstanding Performance**
 - UPS Class switching time (<10ms) supporting essential loads
 - Max. efficiency is up to 97.8%

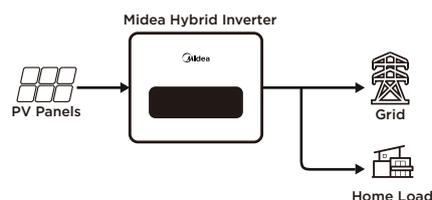
Midea MHELIOS Flex - H Low Voltage Energy Storage

BL Series

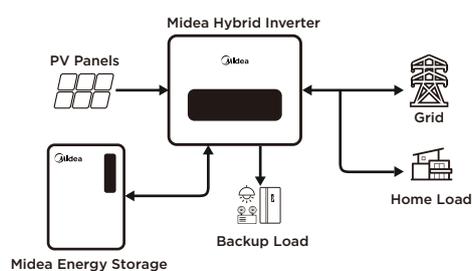


- Friendly Installation**
 - 10mins quick installation by single person
 - Wall mounted or floor mounted meeting various installation.
 - Automatic module ID assignment with one-button operation.
- Safe and Reliable**
 - Remote diagnosis and real-time data monitoring
- Flexible Expansion:**
 - Supports parallel operation (up to 4 units)

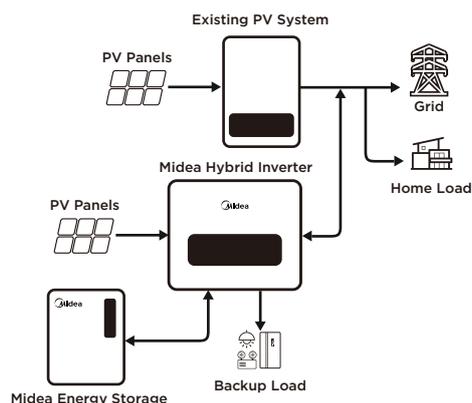
Meets PV only installation



Battery added



Compatible with Existing PV System



EH-5K-A-M0

Midea MHELIOS Flex - H Single-Phase Hybrid Inverter

Single phase
Dual MPPT
Compatible with low voltage battery



Single Phase Hybrid Inverter Model	
Input DC (PV side)	EH-5K
Recommended max. PV input power (Wp)	7500
Max. input voltage (V)	600
Start-up voltage (V)	100
Number of MPP trackers	1/1
Max. input current per MPPT (A)	13/13
Max. input short circuit current per MPPT (A)	18/18
Input DC (Battery)	
Battery type	Lithium-ion, Lead-acid
Battery voltage range (V)	42-58
Max. charging / discharging power (W)	5000/5000
Max. charging/discharging current (A)	100/100
Output / Input AC (Grid side)	
Nominal AC power (W)	5000
Nominal grid voltage	L / N / PE, 230 Vac
Nominal AC current output to utility grid (A)	21.7
Nominal frequency	50 Hz / 60 Hz
Output THDi (@Nominal output)	< 3%
Power factor	1 default (+/-0.8 adjustable)
Output AC (EPS)	
Max. apparent power (VA)	5000
Peak output power, duration (VA, s)	6000,30s
Max. output current (A)	21.7
Nominal voltage, frequency	L / N / PE, 230 Vac, 50 Hz / 60 Hz
THDv (@Symmetrical load)	< 3%
Switch time	10 ms default
Efficiency	
Max. efficiency	97.80%
European efficiency	97.30%
Max. charging/discharging efficiency of battery	94.60%
General Data	
Ambient temperature range	-30 C-+60 C (above 45 C derating)
Degree of protection	IP65
Communication	RS485/CAN/ Wifi
Weight (kg)	21.5
Dimension (mm) (W*H*D)	482*503*183
Certifications & Standards	
EMC	EN 61000-6-2, EN 61000-6-3, EN 61000-3-2, EN 61000-3-3, EN 61000-3-11, EN 61000-3-12
Safety standards	IEC 62109-1 / 2, IEC62040-1
Grid standards	VDE V 0124-100, V 0126-1-1, VDE-AR-N 4105, EN 50549, G99, XP C15-712-3, UNE 217002

*All specifications are subject to change without notice.

BL5.1-A-M1

Midea MHELIOS Flex - H 5.1kWh Midea Low Voltage Energy Storage

Compatible with EH Series
Hybrid Inverter

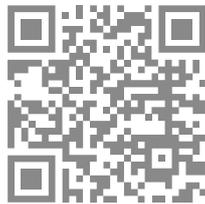


Basic Parameters	BL5.1-A-M1
Total energy	5120Wh
Usable energy(90%DOD)	4608Wh
Nominal valtage	51.2V
Operating voltage range	40.8-57.6V
Nominal capacity	100Ah
Nominal charging/discharging current	50A
Nominal charging/discharging power	2560W
Battery type	LFP
Communication	RS232, CAN
Charge temperature	0°C-55°C
Discharge temperature	- 20°C-60°C
Environmental humidity	5-95%
Operating altitude	≤ 2000 m
Max. number of parallel groups	4
Protection class	IP65
Weight	45kg
Dimension(W*H*D)	396*681*154.5mm
Installation	Wall Mounted / Floor Stand
Certificates	IEC62619, UN38.3

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make yourself at home



✉ infomess@midea.com

🌐 <https://www.midea.com/global/mhelios>