Midea | HICONICS

ENERGY LINKS ALL

Environment Limit

Ingress protection	IP66
Protection class	Class Ⅰ
Pollution degree	PD3
Over voltage category	Ⅲ(MAINS),Ⅱ(DC)
Operating temperature range[℃]	-20~+60(derating at +45)
Max. operation altitude[m]	<3000
Humidty	0-100%, No Condensing
Storage temperature[℃]	-40~+70
Typical noise emission[dBA]	<30
Communication with BMS	CAN
Communication with Meter	RS485
Self-consumption at night [W]	<25
User Interface	LED,APP（LCD Optional)
Warranty[Years]	10

Mechanical Parameter

Dimension（W*H*D） [mm]	710*420*240
Weight[KG]	26.0
Cooling Concept	Natural Convection
Topology	Non-isolated
Communication interfaces	Meter/CT,CAN,RS485,WIFI(External)
HMI	APP
PV connector	MC4 (4~6mm2)
AC connector	Quick Plug
Battey connector	Quick Plug
Certification	IEC/EN 62109-1&2, IEC 62477-1, IEC 61000-6-1/2/3/4,IEC62920,IEC 61000-4-16/18/29, IEC 60529,IEC 60068, IEC 61683,EN50530, CEI 0-21,VDE4105, ISO 13849, IEC62443

Battery Pack	
Component	

Remark

*1: The grid feed in power for VDE4105 is limited 4600VA.

*2: Battery charging current is limited 25A and power is limited 6000W.

*3: The machine may be damaged if PV port exceeds this voltage, full power operation voltage should be less than 480V, 480V-540V for limited power operation.

*4: Battery port boot voltege must be greater than 95V.

*5: The power is 6000W accordting to the grid port.

*6: The value will appear when the grid is charing battery and support EPS load.

Single-Phase Solution

Midea

2023 TOTAL REVENUE (USD)

51.68 B

2023 NET PROFIT (USD)

4.66 B

NUMBER OF EMPLOYEES

190 K+

BY S&P/MOODY'S/FITCH CREDIT RATINGS

A/A3/A

FORTUNE GLOBAL 500 2024

277

FORBES GLOBAL 2000 2023

199

BRAND FINANCE 2023 TOP 500 MOST VALUABLE BRANDS

198

BRAND FINANCE 2023 TOP 100 MOST VALUABLE TECH BRANDS

36

Midea | HICONICS

GLOBAL R&D STRATERGY

4 Research Institutes

Central Academy
Industrial Technology Research Institute
Industrial Technology Research Institute
AI Research Institute

33 R&D Centers

50+ Core Laboratory

25% Masters & PhDs

Aesthetics & Design Center

BILLION LEVEL SUPPLY CHAIN

27.6 B Procurement Volume

100K+ Supplier System

100% Quality Sampling

Top 5 Supplier Resources

INTELLIGENT MANUFACTURING

50+ Years Manufacturing Experience

40 Global Manufacture Centers

Inhouse Production Lines

Beijing & Anqing Manufacturing Cneter

100K GMP Cleanroom

Lighthouse / Digital Factory

QUALITY CONTROL

130 M Dollars Investment

1st in Industry to Conduct:

Mechanical back-to-back test
Simulation test
Motor Load Test

CSA Cooperative Sightings Lab

UL/CE Certificates

Midea | HICONICS

- DC Input Current Up to 20A
- Up to 200% PV Input Power
- Up to 3 MPPT per PCS
- Shadow Scan For Optimal Production

- Smart Swap Battery
- AC Couple, 6-Period TOU & Peak Shaving Functionality
- String Monitoring & IV Curve Diagnosis
- Installation < 15 min & Commissioning < 5 min

- <10ms On-Grid to Off-Grid Transition
- Up to 6 PCS Parallel Operation
- VPP Ready for Various Application
- Smart Midea Heat Pump Control

- ISO 13849 Function Safety & IEC 62443 Cyber Security
- 8 Level Cell Safety Protection
- IP66 Design for Outdoor Application
- AFCI Integrated for Higher Safety

	Single Phase Inverter	MH-HYIV5.0-SHE	MH-HYIV5.68-SHE	MH-HYIV3.8-SHE	MH-HYIV4.0-SHE	MH-HYIV4.6-SHE	MH-HYIV5.0-SHE	MH-HYIV5.0-SHE-BE	MH-HYIV6.0-SHE	MH-HYIV8.0-SHE
PV Input	Max. PV array power[W]	6000	7360	7600	8000	9200	10000	10000	12000	16000
	Max. open circuit voltage[V]	1000								
	Max. input current per string[A]	20								
	Max. short circuit current per string[A]	25								
	MPPT voltage range[V]	80-500								
	Start operating voltage[V]	100								
	No. of MPP tracks	2								3
	String per MPP tracker	1/1								1/1/1
BAT Input	Battery type	LFP								
	Max. charge/discharge power [W]	3000	3600	3800	4000	4600	5000	5000	6000	8000
	Battery voltage range [V]	320-495								
	Max. charge/discharge current [A][2]	25								
AC Grid Input	Nominal Apparent Power from Utility Grid (VA)	6000	7360	7600	8000	9200	10000	10000	12000	12000
	Max. Apparent Power from Utility Grid (VA)	6000	7360	7600	8000	9200	10000	10000	12000	12000
	Nominal AC current[A]	13.6/13	16.4/15.7	17.3/16.6	18.2/17.4	21/20	22.7/21.7	45.4	27.3/26	34.8/36.4
	Max AC current[A]	27.3	33.5	34.6	36.4	41.8	45.4	45.4	50	50
	Nominal grid voltage[V]	L/N/PE 230Va.c								
	Nominal grid frequency[Hz]	50/60								
AC Grid Output	Nominal AC output power[W]	3000	3680	3800	4000	4600	5000	5000	6000	8000
	Max. AC output power[W]	3300	3680	4180	4400	5000	5500	5000	6600	8800
	Max apparent power to Utility Grid [VA]	3300	3680	4180	4400	5000	5500	5000	6600	8800
	Nominal grid voltage[V]	L/N/PE 230Va.c								
	Nominal grid frequency[Hz]	50/60								
	Max output AC current[A]	15	18.2	19	20	22.7	25	22.7	30	36.4
	Nominal output AC current[A]	13.6/13	16.4/15.7	17.3/16.6	18.2/17.4	21/20	22.7/21.7	22.7/21.7	27.3/26	34.8/36.4
	Displacement power factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)								
	THDi[%]	<3@Rated power								
EPS(Off-grid) Output	Nominal EPS ouput apparent power [VA]	3000	3680	3800	4000	4600	5000	5000	6000	8000
	Nominal EPS ouput power[W]	3000	3680	3800	4000	4600	5000	5000	6000	8000
	Max. EPS output apparent power Off Grid[VA]	3300	3680	4180	4400	5000	5500	5000	6600	8800
	Max. EPS output apparent power On Grid[VA]	3300	3680	4180	4400	5000	5500	5000	6600	8800
	Nominal voltage[V]，frequency[Hz]	220/230, 50/60								
	Max output current[A]	13.6/13	16.4/15.7	17.3/16.6	18.2/17.4	21/20	22.7/21.7	22.7/21.7	27.3/26	34.8/36.4
	Nominal output current[A]	13.6/13	16.4/15.7	17.3/16.6	18.2/17.4	21/20	22.7/21.7	22.7/21.7	27.3/26	34.8/36.4
	On Grid to Off Grid Transistion[ms]	<10								
	THDv[%]	<3@Rated power								
Efficiency	MPPT efficiency[%]	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
	Euro efficiency[%]	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
	Max.efficiency[%]	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2
	Battery charge/discharge efficiency[%]	97.6(PV-BAT) 96.08(BAT-AC)	97.6(PV-BAT) 96.08(BAT-AC)	97.6(PV-BAT) 95.4(BAT-AC)	97.6(PV-BAT) 95.4(BAT-AC)	97.6(PV-BAT) 95.4(BAT-AC)	97.6(PV-BAT) 95.4(BAT-AC)	97.6(PV-BAT) 95.4(BAT-AC)	97.6(PV-BAT) 95.4(BAT-AC)	97.6(PV-BAT) 95.4(BAT-AC)