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ENERGY LINKS ALL

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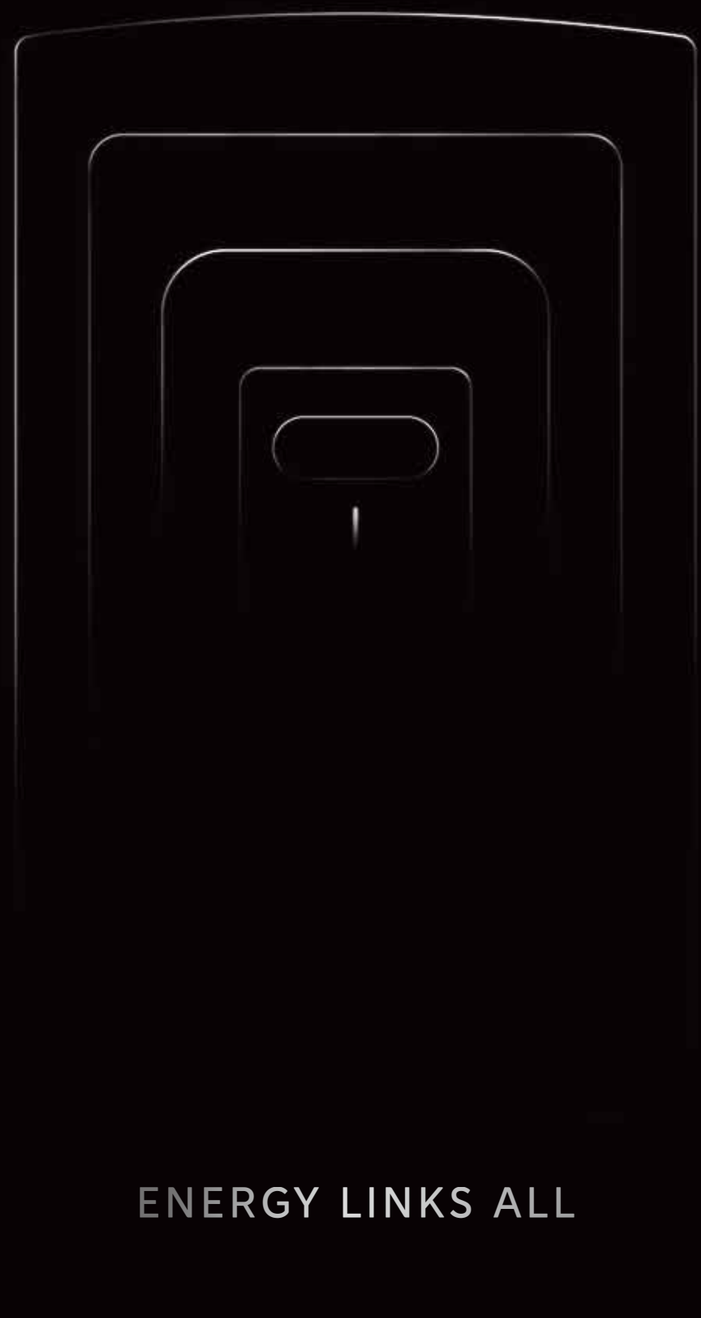

ENERGY LINKS ALL

LEADING ODM PROVIDER OF GREEN ENERGY PRODUCTS

Hiconics was founded in 2003 and listed on the Shenzhen Stock Exchange in 2010 with the stock code "300048". Focusing on the three main businesses of household energy storage and photovoltaic inverters, distributed photovoltaic EPCs, and medium and low voltage VFDs, Hiconics has continued to promote independent innovation for many years and is committed to becoming the world's leading product provider in the field of new energy and energy-saving industrial control. In 2020, Midea Group became the controlling shareholder of Hiconics, further improving the company's internal management level and assisting in the in-depth coordination and empowerment of industrial resources.

The company has more than 1,000 employees, of which about 20% are core scientific research and development personnel, and has more than 200 authorized patents. Through offices all over the world and a perfect after-sales service network, the products are sold to more than 30 countries and regions around the world, providing global customers with a full range of green, efficient and intelligent products and technical solutions.

BUSINESS PROFILE AT A GIANCE

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

ODM VALUE CHAIN
A REPEATABLE PATH FOR EXCELLENCE IN QUALITY DELIVERY

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

27.6B
Procurement Volume

100K+
Supplier System

5
Top 5 Supplier Resources

100%
Quality Sampling

ODM VALUE CHAIN
A REPEATABLE PATH FOR EXCELLENCE IN QUALITY DELIVERY

INTELLIGENT MANUFACTURING

50+
Years Manufacturing Experience

Inhouse Production Lines
Beijing & Anqing Manufacturing Cneter

Lighthouse / Digital Factory

40
Global Manufacture Centers

100K
GMP Cleanroom

QUALITY CONTROL

1ST
In Industry to Conduct:

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

130M
Dollars Investment

CSA
Cooperative Sightings Lab

UL/CE
Certificates

FULL RANGE OF RESIDENTIAL GREEN ENERGY

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1
HIENERGY SERIES
ALL-IN-ONE RESS

2
PV INVERTERS

3
SPLIT-PHASE
ALL-IN-ONE RESS

4
EV CHARGER

5
2-IN-1
HIMAX SERIES
MICROINVERTER

HIENERGY SERIES
ALL-IN-ONE RESS

All-in-one Solution

HIENERGY SERIES SINGLE-PHASE ALL-IN-ONE RESS

ALL-IN-ONE & MODULAR DESIGN

10-30kWh Flexible configuration

Easier transportation, Handling and installation

EASY & QUICK INSTALLATION

Quick Plug Design To significantly reduce installation time

70% Less wiring time

PEACE OF MIND

10 Years warranty for PCS & battery packs

5 Level Pack-level safety design

Fanless Fanless design, more reliable

AESTHETICS FOR THE FUTURE

All-in-one Integration compact design concept

User-based aesthetic design fits with differentiated home with your brand styling

PRODUCT PARAMETER

		HEC2-S3.68Hr2	HEC2-S3.8Hr2	HEC2-S5.0Hr2	HEC2-S6.0Hr2
PV Input	Max.PV array power[W]	3750/3750			
	Max.DC voltage[V]	600*3			
	Nominal DC operating voltage[V]	360			
	MPPT voltage range[V]	100-540			
	MPP voltage range for nominal power[V]*5	137-480	141-480	185-480	225-480
	Start up voltage[V]	120			
	Max.input current(A/B)[A]	15/15			
	Max.short circuit current(A/B)[A]	18/18			
	No.of MPP tracks/String per MPP tracker	2/1			
BAT Side	Battery voltage range[V]	85*4-400			
	Battery voltage range for nominal power[V]	160-400	170-400	225-400	250-400
	Recommended battery voltage[V]	300			
	Max.charge/discharge current[A]*2	25/25			
	Communication interfaces	RS485/CAN			
	Reverse connect protection	Yes			
AC Grid Side (On-grid)	Nominal AC output power[W]	3680	3800	5000*1	6000*1
	Max.Output Power(W)	3680	3800	5000*1	6000*1
	Nominal Apparent Power Output to Utility Grid (VA)	3680	3800	5000*1	6000*1
	Max. Apparent Power Output to Utility Grid (VA)	3680	3800	5000*1	6000*1
	Nominal Apparent Power from Utility Grid (VA)	3680	3800	5000	6000
	Max. Apparent Power from Utility Grid (VA)	6000*6	6000*6	6000*6	6000
	Nominal grid voltage[V]	L/N/PE 230Va.c			
	Grid Voltage Range[V]	180-280			
	Nominal grid frequency[Hz]	50			
	AC Grid Frequency Range (Hz)	50±5			
	Max. output AC current to Utility Grid[A]	16A a.c	16.5A a.c	21.7A a.c	26.1A a.c
	Rate output AC current to Utility Grid[A]	16A a.c	16.5A a.c	21.7A a.c	26.1A a.c
	Rated AC Current From Utility Grid (A)	16A a.c	16.5A a.c	21.7A a.c	26.1A a.c
	Max. AC Current From Utility Grid (A)	26.1*6A a.c	26.1*6A a.c	26.1*6A a.c	26.1A a.c
	Power factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)			
	I.THD[%]	<3@Rated power		<5@Rated power	
EPS Side	Back-up Nominal Apparent Power(VA)	3680	3800	5000	6000
	Nominal power[W]	3680	3800	5000	6000
	Max. Output Apparent Power without Grid (VA)	7500@10sec			
	Max. Output Apparent Power with Grid (VA)	7500@10sec			
	Nominal output voltage[V]	L/N/PE 230Va.c			
	Nominal output frequency[Hz]	50			
	Nominal Output Current (A)	16	16.5	21.7	26.1
	Max.output current[A]	16	16.5	21.7	26.1
	Max.output overcurrent protection[A]	32.6@10sec			
	Switching from Grid Connected Mode to Standalone Mode[ms]	<20			
	Output THD[%]	<5@Linear Load			

Efficiency

MPPT efficiency[%]		99.9		
Euro efficiency[%]	95.0	95.0	95.2	95.2
Max.efficiency[%]	96.5	96.5	96.7	96.8
Battery charge/discharge efficiency[%]	97.6(PV-BAT), 95.4(BAT-AC)	97.6(PV-BAT), 95.4(BAT-AC)	97.6(PV-BAT), 96.0(BAT-AC)	97.6(PV-BAT), 96.0(BAT-AC)

Environment Limit

Ingress protection	IP65
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]	<2000
Humidty	0-95%
Clooling Method	Natural Convection
User Interface	LED,APP
Communication with BMS	CAN/485
Communication with Meter	485
Communication with Portal	WIFI
Typical noise emission[dB]	<40
Dimension（W*H*D）[mm]	800*450*160
Weight[KG]	34
Topology	Non-isolated
Self-consumption at Night (W)	<25
DC Connector	MC4 (4~6mm²)
AC Connector	Quick Plug
Standard warranty[years]	10

Standard

Safety	IEC/EN 62109-1&2, IEC62477
EMC	IEC61000-6-1, IEC61000-6-3
Environment	IEC60529,IEC60068
Efficiency	IEC61683
Certification	EN50549-1,G99,G98,CEI021,VDE4105,AS4777.2,NRS-097

HEC2-BHPxxr2 Series	HEC2-BHP50r2-EU	HEC2-BHP100r2-EU	HEC2-BHP150r2-EU	HEC2-BHP200r2-EU
Component	Base+BMS+1*Module	Base+BMS+2*Module	Base+BMS+3*Module	Base+BMS+4*Module
Nominal Voltage[V]	102.4	204.8	307.2	409.6
Maximum protection voltage[V]	116.8	233.6	350.4	467.2
Minimum protection voltage[V]	89.6	179.2	268.8	358.4
Battery module	Module*1	Module*2	Module*3	Module*4
Nominal capacity[Ah]	50	50	50	50
Total energy[kWh]	5.1	10.2	15.3	20.4
Nominal power [kW]	2.56	5.12	7.68	10.24
Nominal charge/discharge current[A]	25			
Max. charge/discharge current[A]	25			
Cycle life	6000 Cycles (@0.5C,90%DOD,25℃,60%SOH)			
Expected life time	10 Years (60%SOH)			
Operating Temperature (℃)	-20 to 55 (derating above 45℃)			
Storage temperature[°C]	-20°C to 55°C (1 months) ; -20°C to 45°C (3 months) ; -20°C to 35°C(1 year)			
Altitude[m]	Below 2000m			
Protection	IP65			
System to Inverter	RS485/CAN2.0			
Battery to battery / BMS	Daisy chain			
Display Interface	LED			
Switch on/off	Button*1+Breaker*1			
Weight[kg]	69±4	124±6	179±8	234±10
External dimensions(W*H*D) (mm)	(800±20)*(530±30) *(160±20)	(800±20)*(840±30) *(160±20)	(800±20)*(1150±30) *(160±20)	(800±20)*(1460±30) *(160±20)
Remark	1 Series			

HEC2-BHPxxr2 Series	HEC2-BHP200r2-A-EU	HEC2-BHP300r2-A-EU
Component	2*(Base+BMS+2*Module)	2*(Base+BMS+3*Module)
Nominal Voltage[V]	204.8	307.2
Maximum protection voltage[V]	233.6	350.4
Minimum protection voltage[V]	179.2	268.8
Battery module	Module*4	Module*6
Nominal capacity[Ah]	100	100
Total energy[kWh]	20.4	30.6
Nominal power [kW]	10.24	15.36
Nominal charge/discharge current[A]	50	
Max. charge/discharge current[A]	50	
Cycle life	6000 Cycles (@0.5C,90%DOD,25℃,60%SOH)	
Expected life time	10 Years (60%SOH)	
Operating Temperature (℃)	-20 to 55 (derating above 45℃)	
Storage temperature[°C]	-20°C to 55°C (1 months) ; -20°C to 45°C (3 months) ; -20°C to 35°C(1 year)	
Altitude[m]	Below 2000m	
Protection	IP65	
System to Inverter	RS485/CAN2.0	
Battery to battery / BMS	Daisy chain	
Display Interface	LED	
Switch on/off	2*(Button*1+Breaker*1)	
Weight[kg]	248±12	358±16
External dimensions(W*H*D) (mm)	(1600±20)*(840±30) *(160±20)	(1600±20)*(1150±30) *(160±20)
Remark	2 Series Parallel	

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.

HIENERGY SERIES THREE-PHASE ALL-IN-ONE RESS

EASY & QUICK INSTALLATION

No cable
Between batteries

70%
Less wiring time

ALL-IN-ONE & MODULAR DESIGN

Easier transportation,
Handling and installation

PEACE OF MIND

10 Years Warranty

No spare parts,
always replacement

5 LAYER PROTECTION

Explosion-proof Valve

Aerosol

V0 Anti-fire material

High-temperature Resistance cable

System protection Function

ARTISTICAL DESIGN

16 cm Slim

Child & pet friendly: Hidden cabling

IP65 Outdoor rating

PRODUCT PARAMETER

	Three Phase Inverter	HEC2-T8.0Hr2-Eu	HEC2-T10.0Hr2-Eu	HEC2-T12.0Hr2-Eu	HEC2-T15.0Hr2-Eu
PV Input	Max. PV array power[W]	(4250+4250)/5000	(5250+5250)/6000	(5500+5500)/7000	(7000+7000)/8500
	Max. open circuit voltage[V]	1000			
	Max. input current(A/B)[A]	26/16			
	Max. short circuit current(A/B)[A]	30/20			
	Mppt voltage range[V]	180-950			
	Mppt voltage range at full load[V]	327-850	404-850	423-850	540-850
	Start operating voltage[V]	200			
	No. of MPP tracks/String per MPP tracker(A/B)	2/(2/1)			
BAT Input	Battery voltage range[V]	180-650			
	Nominal charge/discharge current[A]	30/30			
	Communication interfaces	RS485/CAN			
	Reverse connect protection	Yes			
AC Grid Input	Nominal AC input power[VA]	16000	20000	20000	20000
	Max. AC input power[W]	16000	20000	20000	20000
	Nominal AC current[A]	22.2/23.2/24.3	27.8/29/30.3	27.8/29/30.3	27.8/29/30.3
	Max AC current[A]	26	32	32	32
	Nominal Apparent Power from Utility Grid (VA)	16000	20000	20000	20000
	Max. Apparent Power from Utility Grid (VA)	16000	20000	20000	20000
	Nominal grid voltage[V]	415/240～;400/230～;380/220V～;3L/N/PE			
	Nominal grid frequency[Hz]	50/60			
AC Grid Output	Nominal AC output power[W]	8000	10000	12000	15000
	Max. AC output power[W]	8800	11000	13200	15000
	Max apparent power to Utility Grid [VA]	8800	11000	13200	15000
	Nominal grid voltage[V]	415/240～;400/230～;380/220V～;3L/N/PE			
	Nominal grid frequency[Hz]	50/60			
	Max output AC current[A]	13.3	16.7	20	24
	Nominal output AC current[A]	11.6@230VAC	14.5@230VAC	17.4@230VAC	21.7@230VAC
	Displacement power factor	-0.8~0.8			
	THDi[%]	<3@Rated power			
EPS(Off-grid) Output	Nominal EPS ouput power[W]	8000	10000	12000	15000
	Max. EPS output apparent power[VA]	8000	10000	12000	15000
	Nominal voltage[V]，frequency[Hz]	230/400，50/60			
	Max output current[A]	12.9	16.1	19.3	24
	Nominal output current[A]	11.6	14.5	17.4	21.7
	Inrush peak Current(A)	65	65	65	65
	Switching from Grid Connected Mode to Standalone Mode[ms]	<20			
	Switching from standalone mode to network connected mode[ms]	> 60s @VDE-AR-N 4105 2018-1			
	THDv[%]	<3@Linear Load			
Efficiency	MPPT efficiency[%]	99.9			
	Euro efficiency[%]	96.1			
	Max.efficiency[%]	97.7			
	Battery charge/discharge efficiency[%]	98.5(PV-BAT)，97(BAT-AC)			

Environment Limit

Three Phase Inverter	HEC2-T8.0Hr2-Eu | HEC2-T10.0Hr2-Eu | HEC2-T12.0Hr2-Eu | HEC2-T15.0Hr2-Eu
Ingress protection	IP65
Protection class	Class Ⅰ
Pollution degree	PD3 (Outside)PD2 (Inside)
Over voltage category	Over voltage category Mains Ⅲ Over voltage category PV\Battery Ⅱ
Operating temperature range[℃]	-20~60(derating at 45)
Max. operation altitude[m]	<3000
Humidty	0-95%
Storage temperature[℃]	-40~70
Typical noise emission[dBA]	<45
Communication with BMS	CAN / RS485
Communication with Meter	RS485
Communication with Portal	RS485

DIMENSION AND WEIGHT

Dimension（W*H*D）[mm]	800(±2)*525(±2)*160(±2)
Weight[KG]	52(±5)
Cooling concept	Smart Cooling
Topology	Non-isolated
Communication interfaces	Meter/CT,CAN,RS485,WIFI(External)
HMI	APP
DC Connector（mm^2）	4-6
AC Connector(mm^2)	6-10
Certification	EN50549-1/EN50549-10，IEC/EN62040-1, IEC/EN 61000-6-1/2/3/4, VDE-AR-N 4105, CEI 0-21, G98/G99, PTPiREE,2021-04; NC RFG; PSE，UNE 217002:2020,UNE 217001:2020，NTS 2019 V2.1, G100, TOR Erzeuger Type A V1.2, AS/NZS4777.2：2020+A1, NRS 097-2-1:2017

HEC2-BHPxxr2 Series	HEC2-BHP100r2-EU	HEC2-BHP150r2-EU	HEC2-BHP200r2-EU
Component	Base+BMS+2*Module	Base+BMS+3*Module	Base+BMS+4*Module
Nominal Voltage[V]	204.8	307.2	409.6
Maximum protection voltage[V]	233.6	350.4	467.2
Minimum protection voltage[V]	179.2	268.8	358.4
Battery module	Module*2	Module*3	Module*4
Nominal capacity[Ah]	50	50	50
Total energy[kWh]	10.2	15.3	20.4
Nominal power [kW]	5.12	7.68	10.24
Nominal charge/discharge current[A]	25		
Max. charge/discharge current[A]	25		
Cycle life	6000 Cycles (@0.5C,90%DOD,25℃,60%SOH)		
Expected life time	10 Years (60%SOH)		
Operating Temperature (℃)	-20 to 55 (derating above 45℃)		
Storage temperature[°C]	-20°C to 55°C (1 months)； -20°C to 45°C (3 months)； -20°C to 35°C(1 year)		
Altitude[m]	Below 2000m		
Protection	IP65		
System to Inverter	RS485/CAN2.0		
Battery to battery / BMS	Daisy chain		
Display Interface	LED		
Switch on/off	Button*1+Breaker*1		
Weight[kg]	124±6	179±8	234±10
External dimensions(W*H*D) (mm)	(800±20)*(840±30) *(160±20)	(800±20)*(1150±30) *(160±20)	(800±20)*(1460±30) *(160±20)
Remark	1 Series		

HEC2-BHPxxr2 Series	HEC2-BHP200r2-A-EU	HEC2-BHP300r2-A-EU	HEC-BHP400r2-A-EU
Component	2*(Base+BMS+2*Module)	2*(Base+BMS+3*Module)	2*(Base+BMS+4*Module)
Nominal Voltage[V]	204.8	307.2	409.6
Maximum protection voltage[V]	233.6	350.4	467.2
Minimum protection voltage[V]	179.2	268.8	358.4
Battery module	Module*4	Module*6	Module*8
Nominal capacity[Ah]	100	100	100
Total energy[kWh]	20.4	30.6	40.8
Nominal power [kW]	10.24	15.36	20.48
Nominal charge/discharge current[A]	50		
Max. charge/discharge current[A]	50		
Cycle life	6000 Cycles (@0.5C,90%DOD,25℃,60%SOH)		
Expected life time	10 Years (60%SOH)		
Operating Temperature (℃)	-20 to 55 (derating above 45℃)		
Storage temperature[°C]	-20°C to 55°C (1 months)； -20°C to 45°C (3 months)； -20°C to 35°C(1 year)		
Altitude[m]	Below 2000m		
Protection	IP65		
System to Inverter	RS485/CAN2.0		
Battery to battery / BMS	Daisy chain		
Display Interface	LED		
Switch on/off	2*(Button*1+Breaker*1)		
Weight[kg]	248±12	358±16	468±20
External dimensions(W*H*D) (mm)	(1600±20)*(840±30) *(160±20)	(1600±20)*(1150±30) *(160±20)	(1600±20)*(1460±30) *(160±20)
Remark	2 Series Parallel		

SPLIT-PHASE ALL-IN-ONE RESS

8+4-Layer Safety Strategy

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SPLIT-PHASE ALL-IN-ONE RESS

8+4-LAYER SAFETY STRATEGY

8 Layer
Battery Safety Protection

Anti-condensation protection
Cells preload design in whole life-cycle
High-temperature resistance insulated pad
Built-in fire extinguisher
Aerogel insulated pads
Decompression valve
8 temperature sensors
5mV Voltage detect accuracy

4 Layer
System Protection

PV disconnection protection
DC ground-fault protection
Grid fault protection
DC bus protection

FLEXIBLE INVESTMENT

90 kWh
Modular design, scalable up to

Multiple
Scenario application

Mixed Use
Old & new batteries

DURABLE & ARTISTICAL

Tahiti Grey
Elegant colour

NEMA 4X
Enclosure

6.7′
Slim

CAPABLE & SIMPLE

25 min Quick installation

50% Commissioning time-saving

Guided quick connectors between batteries

PRODUCT PARAMETER

		7.6kW Datasheet For North America	11.4kW Datasheet For North America（draft）
PV INPUT (ONLY FOR HYBRID)	Max. Solar STC Power [W]	15200	22800
	Max. Input Voltage [V]	550	
	Start-up Input Voltage [V]	100	
	Rated Input Voltage [V]	380	
	MPPT Operating Voltage Range [V]	80-500	
	MPPT Operating Voltage Range [V] (Full Load)	250-500	285-500
	Max. Input Current [A]	20/20/20	40/20/20
	Max. Short-circuit Current [A]	25/25/25	50/25/25
	No. of MPP Trackers	3	
	No. of Strings per MPP Tracker	1/1/1	2/1/1
BATTERY	Max. Charge/Discharge Power (W)	7600	11400
	Battery Normal Voltage (V)	400	
	Battery Voltage Range (V)	325-495	
	Battery Type	LFP	
	Capacity （KWH）	15 \ 20	
	Expected Life Time	10 Years	
	Battery Communication	CAN / RS485	
Gen Input & AC Grid（Input）	Max Input power (W)	7600	11400
	Max. Input Continuous Current (A)	31.7	47.5
	Input Voltage Range(V)	211-264@240	
	Nominal Grid Frequency (Hz)	60	
Back-up（output）	Rated output power (W)	7600	11400
	Max. Output Apparent Power [VA]	7600	11400
	Max. Peak Power (VA) (10S)	11400	15390
	Rated AC output current (A)	31.7	47.5
	Load Start Capacity [A]	90	110
	Nominal AC Voltage L-L (V)	240	
	Nominal AC Voltage L-O (V)	120	
	Nominal AC Frequency (Hz)	60	
	Power Factor	>0.99 (0.8 leading - 0.8 lagging)	
	THDv(@linear load) (%)	< 3 @rated power	
	Imbalance for Split-Phase Loads [%]	100	
Efficiency	Max. Efficiency (%)	97.6	
	CEC Efficiency (%)	97	
	Max. BAT Discharge Efficiency (BAT to AC) (%)	97.4	
	Round Trip Efficiency	89	
	MPPT Efficiency (%)	99.9	
Protection	PV Reverse Polarity Protection	YES	
	Bat. Reverse Polarity Protection	YES	
	Over Current/Voltage Protection	YES	
	Anti-Islanding Protection	YES	
	AC Short Circuit Protection	YES	
	Ground Fault Monitoring	YES	
	Residual Current Detection	YES	
	Insulation Resister Detection	YES	
	PV Arc Detection	YES	
	Rapid Shut Down	YES	

General Data	Dimensions (W x H x D)（mm）	28*66.5*6.7 inch (710*1690*170 mm)
	Weight	Inverter: 71Lbs (32.5Kg) ; System: 397 Lbs (180Kg, Modular Design, no special tools needed)
	Topology	Tranformerless
	Cooling	Natural convection
	Relatively Humidity	0 - 100 % (No Condensation)
	Operating Temperature	Inverter: -13F ~ 140F (-25°C ~ 60°C) System: -4F ~ 131F (-20°C ~ 55°C)
	Storage Temperature	-4F ~ 140F (-20°C ~ 60°C）
	Protection Degree	NEMA4X(hybrid),NEMA3R(hybrid+battery)
	Operating Altitude	< 9842 Ft (3000m)
	Noise Emission (dB)	< 40 @1m
	Mounting	Floor standing/Wall-mounted
	Communication with RSD	SUNSPEC
	Display & Communication Interfaces	LED / RS485, CAN, Wi-Fi,USB
	Certification & Approvals	PV：UL 1699B, UL 1741, UL 3741, UL 1741 SA, UL1741 SB, UL1998 (US), IEEE 1547, IEEE 1547.1 Battery：UL 1973, UL 9540, UL9540A, UL9540B, IEEE 1547, IEEE 1547.1, UN 38.3
	EMC	FCC part15 CLASS B
	Others	Revenue grade metering, ANSI C12.20 operation mode：Backup, self-consumption, TOU, Demand Charge, NEM Integrity

MH Gate1-U US

Grid Voltage (V)	120/240
Feed-In Type	Split Phase
Grid Frequency (Hz)	60
Current Rating (A)	200
Maximum Input Short Circuit Current (kA)	22
Overcurrent Protection Device	Hiconics Hybrid Inverter: 50A Existing Solar (3rd Party): 80A Diesel Generator: 200A Smart Circuits: Circuit 1/80A; Circuit 2&3/50A Non Backup: 160A Backup: 200A
AC Meter	CT: 200 A split core current transformers for metering / 200 A clamp-type current transformers for metering

Performance Specifiction

User Interface	App
Operating Modes	Self-Power/Backup Standby/TOU
Backup Transition	Seamless switch to backup mode
Modularity	allow up to 3 units
Warranty	10 years
Dimensions (W x H x D) (mm)	800×530×160
Weight (kg)	23
Mounting options	Wall Mounted
Certifications	UL 1741, UL 1741 SA, IEEE 1547:2018 (UL 1741-SB, 3rd Ed.), UL 1741 PCS CRD, UL67, UL1 998, UL 869A, CSA 22.2 No. 107.1, 47 CFR Part 15 Class B, ICES 003, ICC ES AC156.
Operating Temperature	-40°C to 50°C
Operating Humidity (RH)	Up to 100%, condensing
Operating Altitude	9842 Ft (3000m)
Environment	Indoor and outdoor rated
Enclosure Type	NEMA 3R

General Data

PV INVERTERS

Highly Customized for Stylish Appearance

STYLISH DESIGN-MAKE YOUR BRAND MORE STYLISH

- CATHEDRAL


WHITE

SILVER COLORFUL

- AMAZON


WHITE


SILVER COLORFUL

- LENCIS


WHITE


SILVER COLORFUL

- CARNIVAL


GREY


SILVER COLORFUL

HIGH YIELD

20A String current: Compatible with all **182/210** PV modules

Dual MPPT With 1.5 DC/AC ratio

Lower startup voltage & wider MPPT voltage range

Dynamic shading optimization mode

PROVEN RELIABILITY

IP66 Protection

AFCI Function Support

Intelligent Networking

EASY TO SETUP

Plug & play Installation

Compact & Lightweight design

Adapted to Diesel generators

PRODUCT PARAMETER

	Model	3k	3.6k	4k	4.6k	5k	6k
Input (DC)	Max.input Voltage	550V					
	MPPT voltage range/rated input voltage	80V~520V/360V					
	Initial.feeed-in voltage	100V					
	Max.operating input current	20/20A					
	Max.short circuit current	25/25A					
	No.of independent MPPT inputs/strings per	2/1+1					
Output (AC)	Rated active power	3000W	3600W	4000W	4600W	5000W	6000W
	Max.apparent power	3300VA	3960VA	4400VA	5000VA	5500VA	6600VA
	Max.output current	15A	16A	20A	22.7A	25A	27.3A
	AC nominal voltage	240V					
	AC Grid frequency	50/60Hz					
	Adjustable power factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)					
	THDi	<3%					
	DC injection current	<0.5%					
Efficiency & Protection	Max.efficiency	97.40%		97.60%			
	EU.efficiency	96.60%		96.80%			
	DC Switch	✓					
	Ground fault monitoring	✓					
	Surge Protection	✓					
	DC reverse polarity protection	✓					
	AC short circuit protection	✓					
	Islanding Protection	✓					
	Over Voltage Protection	✓					
	Over Current Protection	✓					
	Under Voltage Protection	✓					
	All-pole-sensitive residual-current monitoring	✓					
	Shadow recognition	✓					
	AFCI Protection	✓					
	Compatible with Generator	Optional					
General Data	Dimension(L*W*H)	360*360*166mm					
	Weight	12kg					
	Operating temperature range	-25°C ~ +65°C					
	Max. permissible value for relative humidity (non-condensing)	100%					
	Topology	Non-isolated					
	Cooling concept	Natural Convection					
	Altitude	4000					
	Degree of protection	IP66					
Features	DC connection	MC4 connector					
	AC connection	Quick connection plug					
	Display	LED+APP					
	Communication	Wi-Fi/4G/GPRS/RS485 (Optional)					
	Certificates and approvals	UL1741, UL1741 SA, UL 1741 SB, 1699B, IEEE 1547, 1547.1, FCC Part 15 Class B					

EV CHARGER

Smart Charging

CHARGE ANYTIME

Remote control, troubleshooting & upgrading

Timer charging mode

Dynamic charging power control

Priority use of green energy

Intelligent user authentication function

CHARGE ANYWHERE

Automatic phase switching between single & three-phase

IP65 For worry-free outdoor usage

EASY TO USE

Plug-and-charge function

Compact & Light weight design

Support Wi-Fi & 4G

PRODUCT PARAMETER

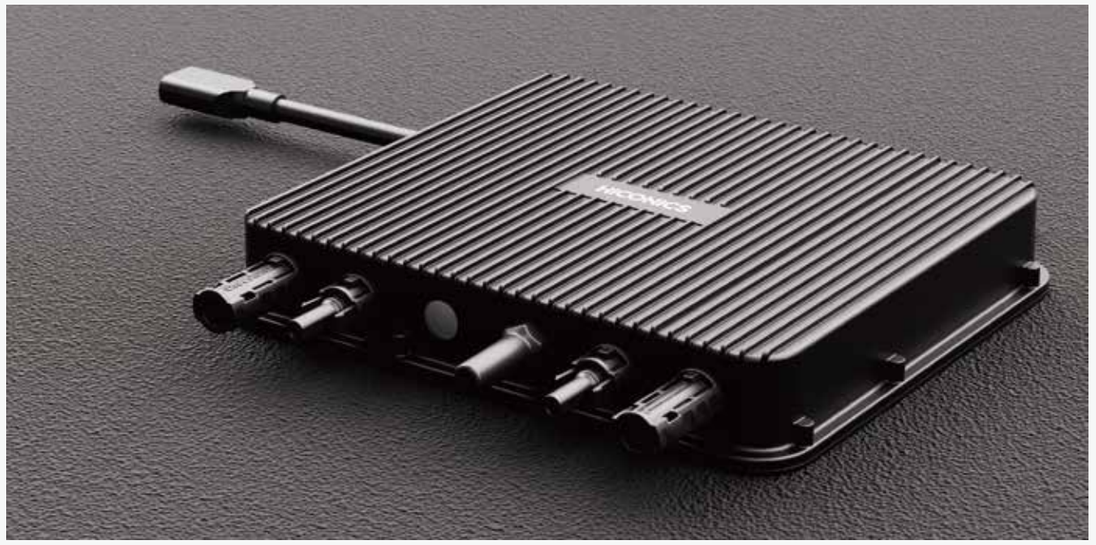
Model	11KW
Input cord	NAMA 6-50 or NAMA 14-50
Input power wiring	L1、L2、PE(Earth)
Rated output power [kW]	11.5
Max. output power [kW]	12
Rated input voltage [V]	208/240
Rated output voltage [V]	208/240
Max.input current [A]	50
Max. output current [A]	50
Grid Frequency [Hz]	60
Connector Type and length	SAE J1772,5-meter standard configuration, 7.5-meter optional
Protection	AC Overvoltage/Undervoltage, AC Short Circuit, AC Overcurrent, AC Current Leakage, Input Ground Fault, Output Ground Fault, AC Surge, Emergency Stop
Ingress protection	IP65
Shell collision class	IK10
Pollution degree	PD3
Operating temperature range [℃]	-30~+50(derating at +50.5)
Max. operation altitude [m]	<2000
Relative humidity	0-95%
Cooling method	Natural Convection
User interface	LED,LCD,APP
Communication with APP	BLE (bluetooth low energy)
Communication with EMS	RJ45
Communication with meter	RS485
Communication with portal	WIFI/4G/3G(Operating cloud: OCPP1.6J or other, maintain cloud:midea)
Typical noise emission [dB]	<40
Dimension（W*H*D）[mm]	233*341*110
Weight [kg]	5
Topology	Non-isolated
Self-consumption at night [W]	<5
Storage temperature [℃]	-40~+80
Standard warranty [years]	4

Standard Compliance

technical specifications	UL2594, UL2231-1,UL2231-2,For Canada CSA C22.2, No. 280, 281.1, 281.2, CEC
EMC	FCC Part 15 Class B
connecter	SAE J1772

2-IN-1 HIMAX SERIES MICROINVERTER

Get Maximized Use of Your Solar Energy



GET MAXIMIZED USE OF YOUR SOLAR ENERGY

IP67 Enclosure ratings

12 Years limited warranty

2-in-1 & quick-plug design

Flexible reactive power control

880VA Max power output

Wi-Fi Automatic Wi-Fi mesh communication

PRODUCT PARAMETER

Commonly used module power (W)	320-540
Peak power MPPT voltage range (V)	32-45
Start-up voltage (V)	≤22
Operating voltage range (V)	16-60
Maximum input voltage (V)	60
Maximum input current (A)	2*14
Maximum input short circuit current (A)	25
Number of MPPTs	2
Number of inputs per MPPT	1
Rated output power (VA)	800
Maximum continuous output power (VA)	880
Maximum continuous output current (A)	3.5
Nominal output voltage (V)	240/211-264
Nominal frequency/range (Hz)	60/58-61
Power factor (adjustable)	0.99/0.8 leading...0.8 lagging
Total harmonic distortion	< 3 %
Max efficiency	95.70%
Nominal MPPT efficiency	≥99.8%
Ambient temperature range (°C)	- 40 °C to + 65 °C
Dimensions (W × H × D mm)	246*236*40.5
Weight (Kg)	≤3.7Kg
Enclosure rating	IP67
Cooling	Free Cooling
Communication	Wi-Fi
Safety Compliance	Safety Compliance: UL1741; CSA C22.2 No. 107.1-16; UL1741SA; UL1741SB; IEEE1547; Rule 21; SRD-V2.0; FCC Part15; 690.12 Rapid Shutdown of PV systems on Buildings

MIRCO ENERGY STORAGE SYSTEM

Multi-scenario Application

Midea | HICONICS

HYBRID INVERTER

Supply power even on-grid/off-grid

Supply power from solar

BATTERY PACK 1

2.5kWh LFP Battery pack

SUPPORTS CAPACITY EXPANSION

4 Maximum 4 Battery can be expansion

10kWh Capacity of the system can reach

HOME APPLIANCE DESIGN

All-in-one

Support desktop placement & use

MULTI-SCENARIO APPLICATION

Balcony energy storage

Energy supply when the grid is off

Portable outdoor power supply

PRODUCT PARAMETER

PV DC Input	Maximum Module Input Power (Wp)	1600
	Maximum Input Voltage (V)	60
	MPPT Voltage Range / Rated Input Voltage (V)	16-60
	Minimum Input Voltage / Start-up Voltage (V)	16
	Numbers Of MPPT/ Number Of Input Strings Per MPPT	2/2
	The Maximum Input Current Per MPPT Group (A)	16*2
	Maximum Short-circuit Current Per MPPT Group	25*2
Battery Input	Rated Battery Energy (kWh)	2.56
	Rated Battery Capacity (Ah)	50
	Voltage (V)	51.2
	Charging Power (W)	1500
	Discharge Power (W)	1500
	Core Type	LiFePo4
AC Grid Output	Rated AC Voltage (V)	220/230/240
	AC Voltage Range (V)	154-276
	Rated AC Grid Frequency (Hz)	50/60
	AC Grid Frequency Range (Hz)	45-55/55-65
	Rated Apparent Power (VA)	800
	Maximum Apparent Power (VA)	800
	Rated AC Grid Output Current A（@230V）	3.5
	Maximum AC Grid Output Current A（@230V）	3.5
	Maximum Total Current Harmonic Distortion THDi(@Rated Power)	<3%
	Rated DC Voltage (V)	220/230/240
	Rated DC Grid Frequency (Hz)	50/60
	Maximum DC Input Power (W)	1500
Common Parameters	Power Factor / Adjustable Range	1/0.8 ahead .....0.8 behind
	Topology	Isolated
	Dimensions (Width/Height/Depth) (mm)	To Be Determind
	Weight (kg)	Hybrid：10kg/BAT: 25kg
	Working Temperature Range	Charging：0℃ to 55℃ Discharging：-20℃ to 55℃
	Cooling Method	Natural Cooling
	Protection Level	IP65
	Maximum Working Altitude (m)	3000
	Lifespan and Warranty	6000 Cycles(@25℃，0.5C/0.5C，70% EOL &10 years)
EPS Output	AC Output	max 1500W
	USB-A Fast Charge	max.18W
	USB-C	max.100W
Functions	User Interface	APP
	Communication Interface	Wifi
Common Parameters	Power Grid	IEC/EN 62109-1, IEC/EN 62109-2 IEC/EN 62619 IEC/EN 63056 VDE2510-50 IEC/EN 61000-6-1/-2/-3/-4, EN62920 ETSI EN 301 489-1 ETSI EN 301 489-17 ETSI EN 300 328 IEC 61000-4-16/18/29(Italy) VDE 4105:2018(Germany) CEI 0-21(Italy)
	Safety Regulations	PTPiREE,2021-04;NC RFG;PSE(Poland)
	EMC	2011/65/EU
	Battery	UN 38.3