

POWERINFI SERIES G2 ALL-IN-ONE RESS

All-in-One. All for You



Midea-Hiconics New Energy, No.3, Boxing Road, Daxing District, Beijing, China
www.hiconics-global.com
solar_service@midea.com



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About Midea Hiconics

Midea Hiconics, a key energy business within Midea Group, specializes in residential energy storage systems, industrial drives and photovoltaic (PV) solutions. With over 20 years of expertise in power electronics and the backing of Midea’s global innovation, we seamlessly integrate energy, appliances, and intelligent control to create smarter, more resilient homes.

Guided by Midea’s vision that energy links all, we see energy not just as power—it’s what links every device, every home, and every future together.

Main Business



VFDs Medium Voltage & Low Voltage



Residential Energy Storage System



Distributed PV EPC

R&D Capability

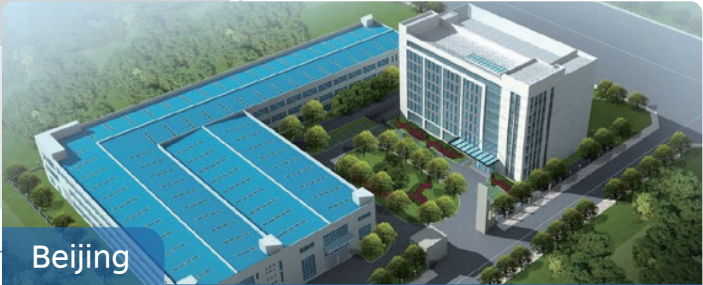
44.5M_{USD}
R & D Investment

300₊
Granted Patents

ISO13849

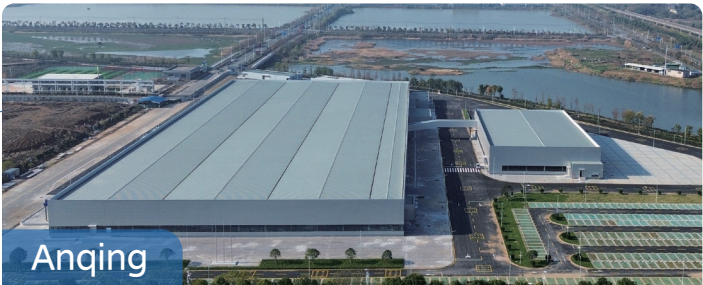
Red dot & IF

Manufacturing Center



Beijing

Total Area:10,900m² Product Scope: VFDs/ESS
Capability of RESS : 1.2GW / Year



Anqing

Total Area:25,000 m² Product Scope: ESS/PV Inverter/Charger
Capability of RESS : 3GW / Year

Service



3

3-Tier Expert Support System
Pre/After- sales+technical+ R&D teams

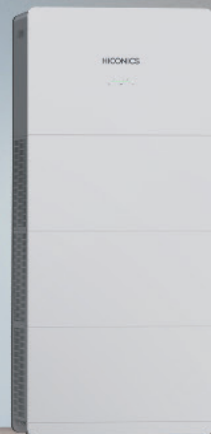


24

24 hours in response
Immediate support within 24 hours



3-8kW / 5-40kWh	Single-Phase
5-15kW / 5-60kWh	Three-Phase



- 20A PV input, compatible with all residential modules
- 3 MPPTs for flexible arrays
- 200% DC/AC ratio for more power
- 200% EPS peak output in 10s

- Seamless integration with Midea heat pumps
- DC-DC supports mixed batteries
- Up to 6 inverters in parallel
- 15-min install, 10-min OTA upgrade

- 10ms on/off grid transition
- Smart fault detection, maximum output
- Supports TOU, VPP
- Unbalanced three-phase output

- 8-level battery protection
- Meets global safety standards
- Module AFCI, IP66 rated
- Insulation & leakage protection

PCS Model	MH-HYIV3.0 -SHE	MH-HYIV3.68 -SHE	MH-HYIV3.8 -SHE	MH-HYIV4.0 -SHE	MH-HYIV4.6 -SHE	MH-HYIV5.0 -SHE	MH-HYIV6.0 -SHE	MH-HYIV8.0 -SHE
PV Input								
Max. input power [W]	6000	7360	7600	8000	9200	10000	12000	12800
Max. input voltage [V]					550			
Rated input voltage [V]					360			
MPPT voltage range [V]					80-500			
Startup voltage [V]					100			
Max. input current per MPPT [A]					20/20			
Max short circuit current per MPPT [A]					25/25	20/20/20 25/25/25		
Number of MPPTs / PV strings per MPPT					2 / 1+1	3 / 1+1+1		
Battery data								
Battery voltage range [V]	320-480							
Max charge / discharge current [A]*@330V	12.5/10.5	12.5/11.7	12.5/13.3	12.5/14.0	18.7/15.8	18.7/17.4	18.7/21.0	25/25
AC Grid Side (On-grid)								
Rated output power [W]	3000	3680	3800	4000	4600	5000	6000	8000
Max. output apparent power [VA]	3300	3680	4180	4400	5000	5500	6600	8000
Max input apparent power from grid [VA]	6000	7360	7600	8000	9200	10000	11500	11500
Rated grid voltage [V] / frequency [Hz]	220/230 V, 50/60 Hz							
Max. output current [A]	15	16.8	19	20	22.8	25	30	36.4
Max. input current from grid [A]	27.3	33.5	34.6	36.4	41.9	45.5	50	50
Power factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)							
I.TH.D [%]	<3@Rated power							
Backup port								
Rated power [W]	3000	3680	3800	4000	4600	5000	6000	8000
Max. output apparent power [VA]	3300	3680	4180	4400	5000	5500	6600	8000
Rated grid voltage [V] / frequency [Hz]	220/230 V, 50/60 Hz							
Max. output current [A]	15	16.8	19	20	22.8	25	30	36.4
Max output peak power [W] / durement [s]	6000, 10s	7360, 10s	7600, 10s	8000, 10s	9200, 10s	10000, 10s	12000, 10s	12000, 10s
Switch time to backup mode [ms]	<10							
Efficiency								
Max.efficiency / Euro efficiency [%]	97.3 / 95.7	97.3 / 96.2	97.3 / 96.2	97.4 / 96.6	97.4 / 96.9	97.4 / 96.9	97.4 / 96.9	97.6 / 97.2
Protection								
Safety protection feature	LVRT, HVRT, Anti-islanding protection, AC output overvoltage / undervoltage protection, AC short circuit protection, AC overcurrent protection, Leakage current protection, DC / AC surge protection, PV insulation resistance detection, PV reverse polarity protection, PV input overvoltage protection, Battery reverse polarity protection, Earthing fault protection, DC arcing detection and protection							
System data								
Dimension (W*H*D) [mm]	710*395*232							
Weight [kg]	27							
Topology	Non-Isolated							
Operating temperature range [°C]	-20~-+60(derating at +45)							
Relative humidity	0 ~ 100%							
Max. operation altitude [m]	≤3000							
Ingress protection	IP66							
Cooling method	Natural Convection							
User interface	LED, APP							
Standard warranty [years]	10							
Certification	IIEC 62109-1: 2010, IEC 62109-2: 2011, EN 62109-1: 2010, EN 62109-2: 2010, EN IEC 61000-6-1:2019, EN IEC 61000-6-2:2019,EN IEC 61000-6-3:2021 ,EN IEC 61000-6-4:2019 EN 62920:2017+A11+A1 CEI 0-21:2022, Clause A.4.6,IEC 62920:2017+A1,NRS 097-2-1:2024, clause 4.9 CISPR 11:2024 ,CISPR 16-2-1:2014+A1, IEC 61000-2-2:2002+A1+A2, IEC 61683, EN50530,IEC60068,CEI 0-21, AS/NZS4777.2, AS60947.3, EN50549-1/-10, C10/C11, G98+G99+G100, IEC61727,IEC62116,NTS+UNE217001+UNE217002+RD647, NRS 097-2-1, TR 3.3.1:2024, MEA/PEA							
Battery System Model								
	MH-BAT5.0 -HPE-G	MH-BAT10.0 -HPE-G	MH-BAT15.0 -HPE-G	MH-BAT20.0 -HPE-G	MH-BAT25.0 -HPE-G	MH-BAT30.0 -HPE-G	MH-BAT35.0 -HPE-G	MH-BAT40.0 -HPE-G
Sizes (W*H*T) [mm]	710*465*170	710*835*170	710*1205*170	710*1575*170	710*1260*170/ 710*835*170	710*1260*170/ 710*1205*170	710*1630*170/ 710*1205*170	710*1630*170/ 710*1575*170
Weight[kg]	56.4	106.4	156.4	206.4	266.9	316.9	366.9	416.9
Rated / Useable Capacity [kWh]	5.12/ 5	10.24/ 10	15.36/ 15	20.48/ 20	25.6/ 25	30.72/ 30	35.84/ 35	40.96/ 40
Max. charge / discharge power [kW]	2.5@continuous 3.5@10minutes	2.5*2@continuous 3.5*2@10minutes	2.5*3@continuous 3.5*3@10minutes	2.5*4@continuous 3.5*4@10minutes	2.5*5@continuous 3.5*5@10minutes	2.5*6@continuous 20.5@10minutes	2.5*7@continuous 20.5@10minutes	20.5 continuous
Max. continuous charge / discharge current [A]	6.9	13.8	20.7	27.6	34.5	41.4	48.3	50
Peak charge / discharge current [A] (10min)	8.54	17.08	25.62	34.16	42.7	50	50	50
Rated Voltage/Voltage Range	410 / 362 ~ 464							
Operating ambient temperature	-20~50°C							
Operating ambient humidity	0~100% RH							
Cooling	Natural Convection							
Altitude	≤3000m							
Ingress Protection rate	IP66							
Mounting	Floor-Mounted / Wall-Mounted							
Cell type and Cell Room Temperature Cycle Life(25°C±2°C)	LFP, 6000 Cycles 0.5C/0.5C @70%SOH							
Standard warranty [years]	10 (The warranty expires upon whichever comes first: the warranty period or the battery cell temperature cycle life.)							
Certification	IEC62477-1, IEC62040-1, IEC62619, IEC 63056, ISO 13849, ISO 4892-4, UN38.3/MSDS, VDE-AR-N 2510-50, IEC61000-6-1/-2/-3/-4							

PCS Model	MH-HYIV5.0 -THE	MH-HYIV6.0 -THE	MH-HYIV8.0 -THE	MH-HYIV10.0 -THE	MH-HYIV10.0 -THE-BE	MH-HYIV12.0 -THE	MH-HYIV15.0 -THE	
PV Input								
Max. input power [W]	10000	12000	16000	20000	20000	24000	30000	
Max. input voltage [V]				1000				
Rated input voltage [V]				650				
MPPT voltage range [V]				180-850				
Startup voltage [V]				200				
Max. input current per MPPT [A]	20/20			20/20/20				
Max. short circuit current per MPPT [A]	25/25			25/25/25				
Number of MPPTs / PV strings per MPPT	2 / 1+1			3 / 1+1+1				
Battery data								
Battery voltage range [V]				320-495				
Max.charge/discharge current [A]*@350V	25/16.5	25/19.8	25/25	37/32.9	37/29.9	37/37	46.8/46.8	
AC Grid Side (On-grid)								
Rated output power [W]	5000	6000	8000	10000	10000	12000	15000	
Max. output apparent power [VA]	5500	6600	8800	11000	10000	13200	16500	
Max. input apparent power from grid [VA]	10000	12000	16000	20000	20000	24000	29600	
Rated grid voltage [V] / frequency [Hz]	380 / 400 V, 50 / 60 Hz							
Max. output current [A]	8.4	10	13.4	16.7	15.2	20	25	
Max. input current from grid [A]	15.2	18.2	24.3	30.4	30.4	36.5	43	
Power factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)							
I.TH.D [%]	<3@Rated power							
Backup port								
Rated power [W]	5000	6000	8000	10000	10000	12000	15000	
Max. output apparent power [VA]	5500	6600	8800	11000	10000	13200	16500	
Rated grid voltage [V] / frequency [Hz]	380 / 400 V, 50 / 60 Hz							
Max. output current [A]	8.4	10	13.4	16.7	15.2	20	25	
Max. output peak power [W] / durement[s]	10000, 10s	12000, 10s	16000, 10s	20000, 10s	20000, 10s	24000, 10s	24000, 10s	
Switch time to backup mode [ms]	<10							
Efficiency								
Max.efficiency / Euro efficiency [%]	97.5 / 95.5	97.5 / 95.9	97.5 / 96.5	97.5 / 96.8	97.5 / 96.8	97.5 / 96.9	97.5 / 97.2	
Protection								
Safety protection feature	LVRT, HVRT, Anti-islanding protection, AC output overvoltage / undervoltage protection, AC short circuit protection, AC overcurrent protection, Leakage current protection, DC / AC surge protection, PV insulation resistance detection, PV reverse polarity protection, PV input overvoltage protection, Battery reverse polarity protection, Earthing fault protection, DC arcing detection and protection							
System data								
Dimension (W*H*D) [mm]	710*495*255							
Weight [kg]	36			40				
Topology	Non-Isolated							
Operating temperature range [°C]	-20~+60(derating at +45)							
Relative humidity	0 ~ 100%							
Max. operation altitude [m]	≤3000							
Ingress protection	IP66							
Cooling method	Natural Convection			Smart air cooling				
User interface	LED, APP							
Standard warranty [years]	10							
Certification	IIEC 62109-1: 2010, IEC 62109-2: 2011, EN 62109-1: 2010, EN 62109-2: 2010, IEC 61000-6-1/2/3/4, EN62920, IEC 61000-4-16/18/29, IEC 61683, EN50530, CEI 0-21, VDE4105, AS/NZS4777.2, AS60947.3, EN50549-1/-10, TOR TypeA, NC RFG Type A, C10/C11, G98+G99+G100, IEC61727, IEC62116, SFS-EN50549-1, TR3.3.1, EIFS 2018:2, IEC63056, ETSI EN303645							
Battery System Model	MH-BAT5.0 -HPE-G	MH-BAT10.0 -HPE-G	MH-BAT15.0 -HPE-G	MH-BAT20.0 -HPE-G	MH-BAT25.0 -HPE-G	MH-BAT30.0 -HPE-G	MH-BAT35.0 -HPE-G	MH-BAT40.0 -HPE-G
Sizes (W*H*T) [mm]	710*465*170	710*835*170	710*1205*170	710*1575*170	710*1260*170 / 710*835*170	710*1260*170 / 710*1205*170	710*1630*170 / 710*1205*170	710*1630*170 / 710*1575*170
Weight[kg]	56.4	106.4	156.4	206.4	266.9	316.9	366.9	416.9
Rated / Useable Capacity [kWh]	5.12 / 5	10.24 / 10	15.36 / 15	20.48 / 20	25.6 / 25	30.72 / 30	35.84 / 35	40.96 / 40
Max. charge / discharge power [kW]	2.5@continuous 3.5@10minutes	2.5*2@continuous 3.5*2@10minutes	2.5*3@continuous 3.5*3@10minutes	2.5*4@continuous 3.5*4@10minutes	2.5*5@continuous 3.5*5@10minutes	2.5*6@continuous 20.5@10minutes	2.5*7@continuous 20.5@10minutes	20.5 continuous
Max. continuous charge / discharge current [A]	6.9	13.8	20.7	27.6	34.5	41.4	48.3	50
Peak charge / discharge current [A] (10min)	8.54	17.08	25.62	34.16	42.7	50	50	50
Rated Voltage/Voltage Range	410 / 362 ~ 464							
Operating ambient temperature	-20~50°C							
Operating ambient humidity	0~100% RH							
Cooling	Natural Convection							
Altitude	≤3000m							
Ingress Protection rate	IP66							
Mounting	Floor-Mounted / Wall-Mounted							
Cell type and Cell Room Temperature Cycle Life(25°C±2°C)	LFP, 6000 Cycles 0.5C/0.5C @70%SOH							
Standard warranty [years]	10 (The warranty expires upon whichever comes first: the warranty period or the battery cell temperature cycle life.)							
Certification	IEC62477-1, IEC62040-1, IEC62619, IEC 63056, ISO 13849, ISO 4892-4, UN38.3/MSDS, VDE-AR-N 2510-50, IEC61000-6-1/-2/-3/-4							

Remarks: Our all-in-one unit supports flexible battery capacity expansion from 5 kWh to 60 kWh.
Note that some capacity models are not fully displayed due to display/system limitations.

PowerInfi: Where Clean Energy Meets Smart Living



Integrated & Scalable Architecture

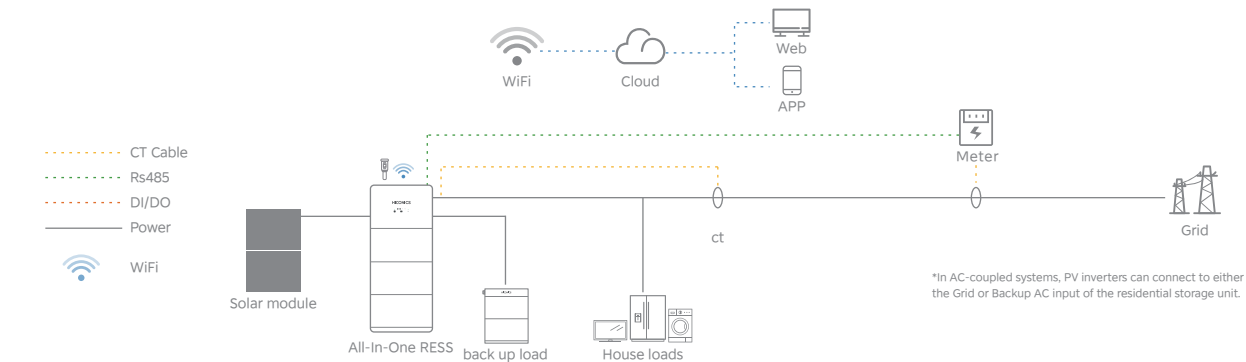
Supports parallel operation of up to 6 units, hybrid integration with diesel generators and AC-coupled PV systems, and flexible system expansion — enabling customizable residential energy solutions.



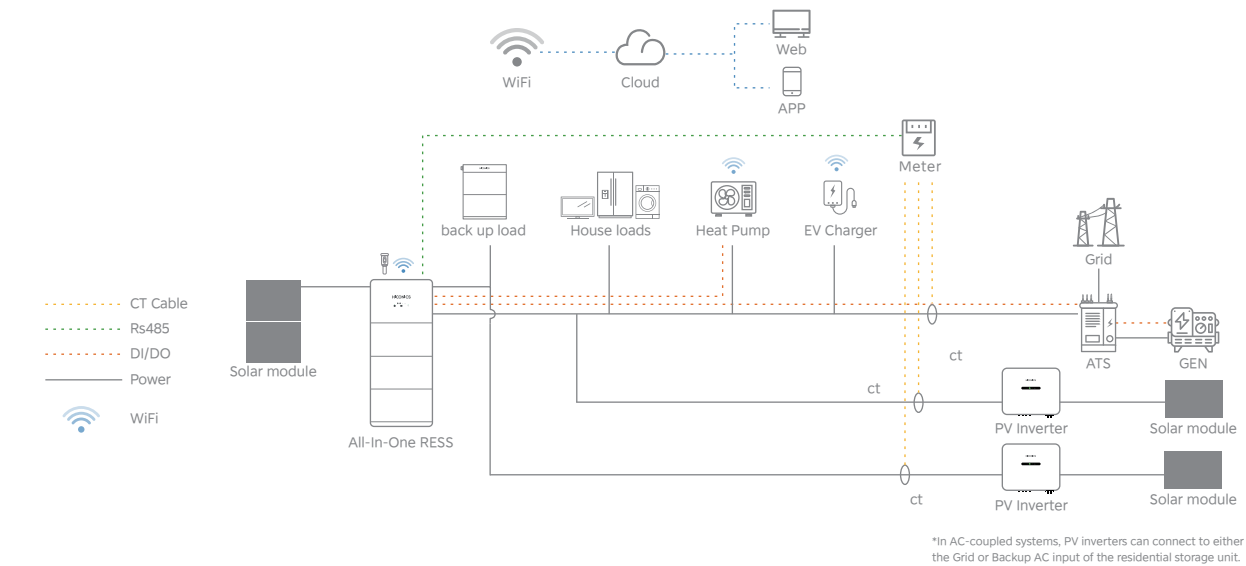
Intelligent Energy Orchestration

Optimizes household loads in real time — including heat pumps and EV charging — based on solar generation, battery state, dynamic tariffs, and usage patterns, maximizing self-consumption and reducing electricity costs.

Residential Energy Eco-Living System



Residential Solar & Storage System



Residential Energy Eco-Living System (ESS Parallel Operation)

