

POWERX1 SERIES HYBRID INVERTER

The next generation of power



📍 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

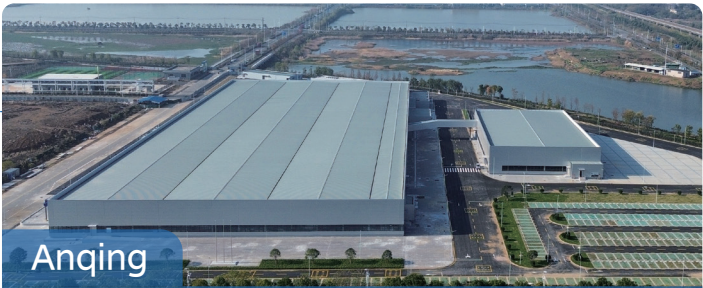
Red dot & IF

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



Three-Phase



- 10ms on/off-grid transition
- TOU, VPP, peak shaving, dynamic control
- 100% three-phase unbalanced output
- Smart Home App monitoring

Certification

Three phase 20~30kW



MODEL	MH-HYIV15.0-TH-S4	MH-HYIV20.0-TH	MH-HYIV25.0-TH	MH-HYIV29.9-TH	MH-HYIV30.0-TH
PV Input					
Max. input power [W]	30000	40000	50000	59800	60000
Max. input voltage [V]	1000	1000	1000	1000	1000
Rated input voltage [V]	650	650	650	650	650
MPPT voltage range [V]	160-850	160-850	160-850	160-850	160-850
Startup voltage [V]	180	180	180	180	180
Max. input current per MPPT [A]	36/36	36/36	36/36/36	36/36/36	36/36/36
Max. short circuit current per MPPT [A]	45/45	45/45	45/45/45	45/45/45	45/45/45
Number of MPPTs / Number of PV strings per MPPT	2 /2+2	2 /2+2	3/2+2+2	3/2+2+2	3/2+2+2
Battery data					
Battery type	Lithium-ion	Lithium-ion	Lithium-ion	Lithium-ion	Lithium-ion
Max. charge / discharge power [W]	16500	22000	27500	30000	33000
Battery voltage range [V]	160-750	160-750	160-750	160-750	160-750
Max. charge / Discharge current [A]	50	50	50+50	50+50	50+50
Number of Battery Input	1	1	2	2	2
AC Grid Side (On-grid)					
Rated output power [W]	15000	20000	25000	29900	30000
Max. output apparent power [VA]	16500	22000	27500	29900	33000
Max. input apparent power from grid [VA]	30000	40000	50000	60000	60000
Rated grid voltage [V]	3L/N/PE, 220 / 380, 230 / 400	3L/N/PE, 220 / 380, 230 / 400	3L/N/PE, 220 / 380, 230 / 400	3L/N/PE, 220 / 380, 230 / 400	3L/N/PE, 220 / 380, 230 / 400
Rated grid frequency [Hz]	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60
Rated output current [A]	22.8/21.8	30.4/29	37.9/36.3	45.4/43.4	45.4/43.5
Max. output current [A]	25/24	33.4/31.9	41.7/39.9	45.4/43.4	50/47.9
Max. input current from grid [A]	45.5/43.3	60.6/57.7	76.0/72.2	90/86.6	90/86.6
Power factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)				
I.TH.D [%]	<3@Rated power				
Backup port					
Rated power [W]	15000	20000	25000	29900	30000
Max. output apparent power [VA]	16500	22000	27500	29900	33000
Rated output voltage [V]	3L/N/PE, 220 / 380, 230 / 400	3L/N/PE, 220 / 380, 230 / 400	3L/N/PE, 220 / 380, 230 / 400	3L/N/PE, 220 / 380, 230 / 400	3L/N/PE, 220 / 380, 230 / 400
Rated output frequency [Hz]	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60
Rated output current [A]	22.8/21.8	30.4/29	37.9/36.3	45.4/43.4	45.4/43.5
Max. output current [A]	25/24	33.4/31.9	41.7/39.9	45.4/43.4	50/47.9
Max. output peak power [W] / durement [s]	30000 (<10S)	40000 (<10S)	40000 (<10S)	48000 (<10S)	48000 (<10S)
Switching from grid connected mode to standalone mode [ms]	< 10	< 10	< 10	< 10	< 10
Output V. THD [%]	<3@Linear Load	<3@Linear Load	<3@Linear Load	<3@Linear Load	<3@Linear Load
Efficiency					
Max.efficiency [%]	97.80%	97.80%	97.80%	97.80%	97.80%
Euro efficiency [%]	97.20%	97.20%	97.20%	97.20%	97.20%
Protection					
Safety protection feature	Anti-Islanding protection, DC reverse polarity protection, Insulation monitoring, Residual current monitoring, Type II DC / AC surge protection, DC arcing detection and protection (Optional), Three phase unbalanced output				
System data					
Dimension (W*H*D) [mm]	540*790*230				
Weight [kg]	48KG				
Topology	Non-Isolated				
Operating temperature range [°C]	-25~+60 (Derating above + 45)				
Relative humidity	0-100%(Non-condensing)				
Max. operation altitude [m]	3000m (derating above 2000m)				
Ingress protection	IP66				
Cooling method	Intelligent fan-cooling				
User interface	LED, APP, LCD(Optional)				
Communication with BMS	CAN				
Typical noise emission [dB]	< 55	< 55	< 55	< 60	< 60
Standard warranty [years]	5				
Certification	IEC/EN 62109-1/2, IEC/EN 61000-6-1/2/3/4, IEC/EN 61000-4-16/18/29, IEC 63027, VDE-AR-N 4105, CEI 0-21, PTPIREE:2021-04; NC RFG; PSE, EN50549-1/-10				

Power X1: Empowering Smart Living With Clean Energy

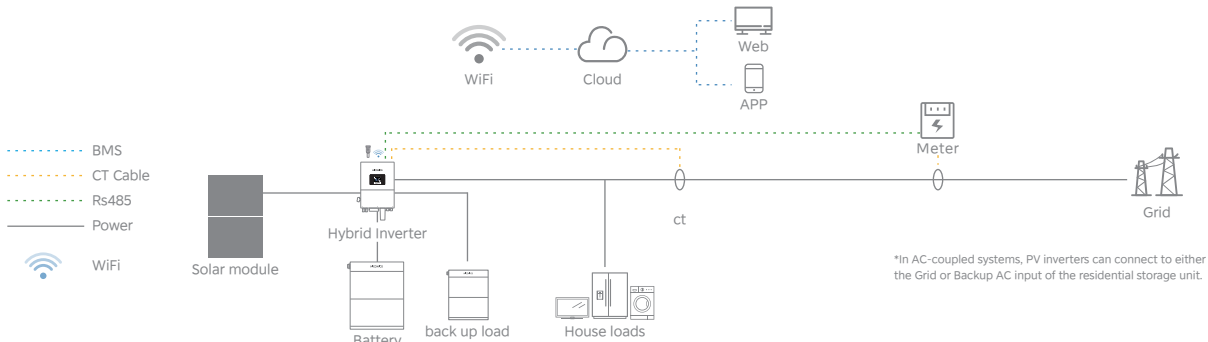
Integrated & Scalable Architecture

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.

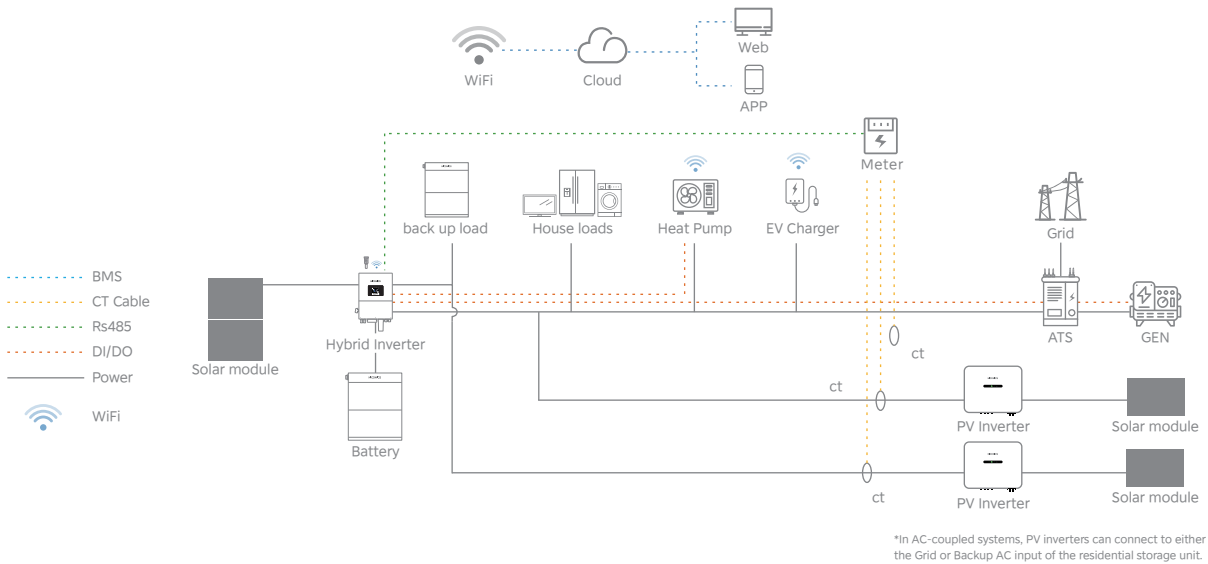
Intelligent Energy Orchestration

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)

