Midea | HICONICS




# HIENERGY SERIES ALL-IN-ONE RESS

Single-Phase Solution

# ENERGY LINKS ALL

## COMPLETE VALUE CHAIN FOR EXCELLENCE IN QUALITY DELIVERY

| 2024 TOTAL REVENUE (USD) | 2024 NET PROFIT (USD) | NUMBER OF EMPLOYEES | BY S&P/MOODY'S |
|---|---|---|---|
| 56.82 B | 5.34 B | 190 K+ | A/A2/A |

| FORTUNE GLOBAL 500 2025 | FORBES GLOBAL 2000 2024 | BRAND FINANCE 2024 TOP 500 MOST VALUABLE BRANDS | BRAND FINANCE 2024 TOP 100 MOST TECH BRANDS |
|---|---|---|---|
| # 246 | # 205 | # 236 | # 40 |

### GLOBAL R&D STRATERGY

**4** Research Institutes

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

**33** R&D Centers

**25%** Masters & PhDs

**50+** Core Laboratory

Aesthetics & Design Center

### BILLION LEVEL SUPPLY CHAIN

**27.6 B** Procurement Volume

**100 K+** 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

**100 K** GMP Cleanroom

Lighthouse / Digital Factory

### QUALITY CONTROL

**130 M** Dollars Investment

**1 st** in Industry to Conduct:

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

**CSA** Cooperative Sightings Lab

**UL/CE** Certificates

# HIENERGY SERIES SINGLE-PHASE ALL-IN-ONE RESS

## 5/6kW | 5/10/15/20/30kWh

SYSTEM CONFIGURATION / MULTIPLE SYSTEM SIZING

| 5, 6kW/5kWh | 5, 6kW/10kWh | 5, 6kW/15kWh | 5, 6kW/20kWh | 5, 6kW/30kWh |
|---|---|---|---|---|
|  |  |  |  |  |
| Hybrid inverter × 1<br>BMS Control box × 1<br>Battery pack × 1<br>Base × 1 | Hybrid inverter × 1<br>BMS Control box × 1<br>Battery pack × 2<br>Base × 1 | Hybrid inverter × 1<br>BMS Control box × 1<br>Battery pack × 3<br>Base × 1 | Hybrid inverter × 1<br>BMS Control box × 2<br>Battery pack × 4<br>Base × 2<br>4m/8m/12m parallel cable x1 | Hybrid inverter × 1<br>BMS Control box × 2<br>Battery pack × 6<br>Base × 2<br>4m/8m/12m parallel cable x1 |

**10**
Years Warranty

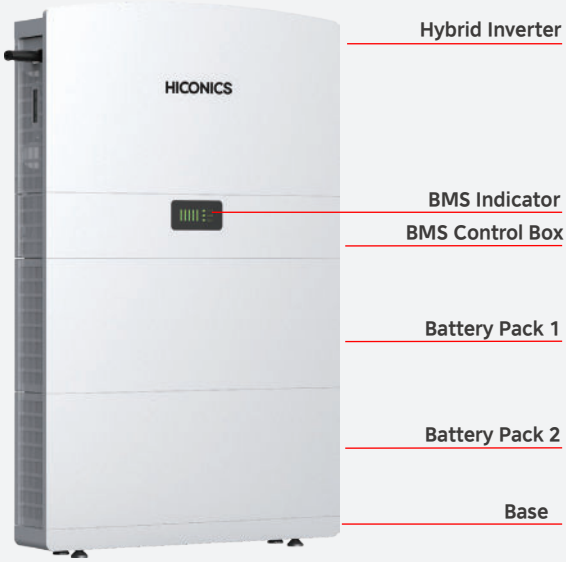
Hybrid Inverter &
Battery Packs

**3**
Levels support

Online support + local support
+ experts onsite

**24**
Hours response

Response in time
Parts stock in Australia




## Intelligent Warehousing

Building up logistics system, one-stop supply of equipment and accessories to shorten delivery time.

## Remote Support

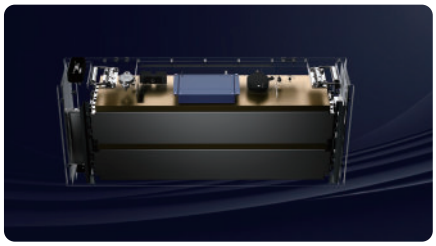
Online remote support, discover field problems via data logger. Based on demand of customers and partners, provide support within 24 hours.

## Local After-sales Team

Local after-sales team from Hiconics will be able to provide onsite technical support and offer training regarding the product installation and after-sales issues.

Fast, flexible and accurate response to maximize customer personalized needs.

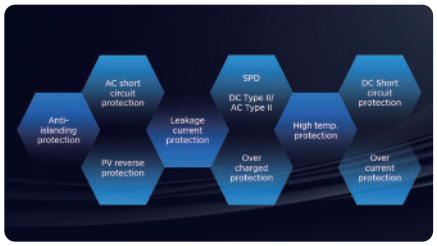
## ULTIMATE SAFETY



5 Level cell Protection




Advanced Thermal Management




System Protection

## EASY INSTALLATION



Stackable Modular Design



Quick Plug, No Extra Wiring




Quick Installation and Commissioning

## RESIDENTIAL INTEGRATION




Durable Design for Extreme Conditions




Aesthetic & Harmonious Design

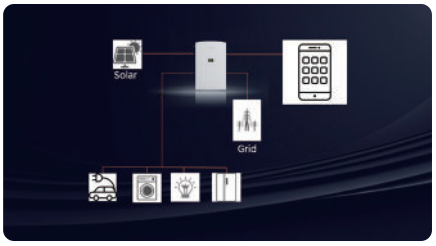



Quiet Operation

## SMART CONTROL



3rd Party EMS Compatibility




TOU




Seamless On/Off Grid Transition

### ON-GRID AND OFF-GRID SUPPORTED

Compatible with both grid-connected and standalone systems
Ideal for homes with backup power needs or remote locations

### VPP CAPABILITY

Can be coordinated via Virtual Power Plant (VPP) networks
Enables participation in energy trading and grid services

### ※CEC Approved Product

Listed by the Clean Energy Council (CEC), Australia — compliant with local standards and eligible for government rebates.

# PRODUCT PARAMETER

| | | HEC2-S5.0Hr2 | HEC2-S6.0Hr2 |
|---|---|---|---|
| PV Input | Max. recommended PV array power[kWp] | 9 (4.5/4.5) | |
| | Max.DC voltage[V] | 600 | |
| | Nominal DC operating voltage[V] | 360 | |
| | MPPT voltage range[V] | 100-540 | |
| | MPPT voltage range for nominal power[V] | 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] | 85-400 | |
| | Battery voltage range for nominal power[V] | 225-400 | 250-400 |
| | Recommended battery voltage[V] | 300 | |
| | Max.charge/discharge current[A] | 25/25 | |
| | Communication interfaces | RS485/CAN | |
| | Reverse connect protection | Yes | |
| AC Grid Side (On-grid) | Nominal AC output power[W] | 5000 | 6000 |
| | Max.Output Power(W) | 5000 | 6000 |
| | Nominal Apparent Power Output to Utility Grid (VA) | 5000 | 6000 |
| | Max. Apparent Power Output to Utility Grid (VA) | 5000 | 6000 |
| | Nominal Apparent Power from Utility Grid (VA) | 5000 | 6000 |
| | Max. Apparent Power from Utility Grid (VA) | 6000 | 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] | 21.7A a.c | 26.1A a.c |
| | Rate output AC current to Utility Grid[A] | 21.7A a.c | 26.1A a.c |
| | Rated AC Current From Utility Grid (A) | 21.7A a.c | 26.1A a.c |
| | Max. AC Current From Utility Grid (A) | 26.1A a.c | 26.1A a.c |
| | Power factor | ~1 (Adjustable from 0.8 leading to 0.8 lagging) | |
| | I.THD[%] | <5@Rated power | |
| EPS Side | Back-up Nominal Apparent Power(VA) | 5000 | 6000 |
| | Nominal power[W] | 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) | 21.7 | 26.1 |
| | Max.output current[A] | 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[%] | 95.2 | 95.2 |
| Max.efficiency[%] | 96.7 | 96.8 |
| Battery charge/discharge efficiency[%] | 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 | 0-100% |
| Clooling Method | Natural Convection |
| User Interface | LED,APP |
| Communication with BMS | CAN/RS485 |
| Communication with Meter | RS485 |
| 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, AS/NZS 61000.6.3, AS/NZS 61000.6.1 |
| Environment | IEC60529, IEC60068 |
| Efficiency | IEC61683 |
| Certification | AS/NZS 4777.2, NRS 097-2-1, EN50549-1, G99, G98, CEI0-21, VDE-AR-N 4105 |

| HEC2-BHPxxr2 Series | HEC2-BHP50r2 | HEC2-BHP100r2 | HEC2-BHP150r2 |
|---|---|---|---|
| Component | Base+BMS+1*Module | Base+BMS+2*Module | Base+BMS+3*Module |
| Battery Capacity | 5kWh | 10kWh | 15kWh |
| Battery Qty | 1 | 2 | 3 |
| Nominal Voltage[V] | 102.4 | 204.8 | 307.2 |
| Maximum protection voltage[V] | 116.8 | 233.6 | 350.4 |
| Minimum protection voltage[V] | 89.6 | 179.2 | 268.8 |
| Nominal capacity[Ah] | 50 | 50 | 50 |
| Total energy[kWh] | 5.1 | 10.2 | 15.3 |
| Nominal power [kW] | 2.56 | 5.12 | 7.68 |
| Nominal charge/discharge current[A] | 25 | | |
| Max. charge/discharge current[A] | 25 | | |
| Cycle life | 6000 Cycles (@0.5C,90%DOD,25℃,70%SOH) | | |
| Expected life time | 10 Years (70%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 | | |
| Certification | CE, IEC62619, IEC62040, IEC60529, IEC61000, UN38.3 | | |
| Weight[kg] | 69±4 | 124±6 | 179±8 |
| External dimensions(W*H*D) (mm) | (800±20)*(530±30) *(160±20) | (800±20)*(840±30) *(160±20) | (800±20)*(1150±30) *(160±20) |
| Remark | 1 Series | | |

| HEC2-BHPxxr2 Series | HEC2-BHP200r2-A | HEC2-BHP300r2 |
|---|---|---|
| Component | 2*(Base+BMS+2*Module) | 2*(Base+BMS+3*Module) |
| Battery Capacity | 20kWh | 30kWh |
| Battery Qty | 4 | 6 |
| Nominal Voltage[V] | 204.8 | 307.2 |
| Maximum protection voltage[V] | 233.6 | 350.4 |
| Minimum protection voltage[V] | 179.2 | 268.8 |
| 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℃,70%SOH) | |
| Expected life time | 10 Years (70%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) | |
| Certification | CE, IEC62619, IEC62040, IEC60529, IEC61000, UN38.3 | |
| 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 | |

① The maximum input voltage is the upper limit of the DC voltage. Any higher input DC voltage would probably damage the inverter
② Input voltage exceeding the MPPT voltage range may trigger inverter protection




ENERGY LINKS ALL