



# HIENERGY SERIES ALL-IN-ONE RESS

Three-Phase Solution

## ULTIMATE SAFETY

- 5 Level cell Protection
- Advanced Thermal Management
- System Function Safety\*
- Cyber Security for Operation & Data\*

## RESIDENTIAL INTEGRATION

- IP65 Protection & -20~55 degree operation range
- Home Appliance Power Integration
- Super Slim, Space Saving
- Aesthetic & Harmonious Design
- Silent

## EASY INSTALLATION

- Stackable Modular Design
- Quick Plug, No Extra Wiring
- Installation Time <20 min
- 5 min Fast Commissioning

## SMART CONTROL

- 3<sup>rd</sup> Party EMS Compatibility
- TOU(6 time schedule & support maximum power buying setting ), Saving more + VPP Ready
- Seamless On/Off Grid Transition

Model	HEC2-T8.0Hr2-Eu	HEC2-T10.0Hr2-Eu	HEC2-T12.0Hr2-Eu	HEC2-T15.0Hr2-Eu
<b>PV Input</b>				
Max. PV array power[kW]	13.5 (4.25+4.25/5.0)	16.5(5.25+5.25/6.0)	18(5.5+5.5/7.0)	22.5(7.0+7.0/8.5)
Max. open circuit voltage[V]			1000	
Max. input current(A/B)[A]	26/16	26/16	26/16	26/16
Max. short circuit current(A/B)[A]			30/20	
Mppt voltage range[V]			180-950	
Start operating voltage[V]			200	
No. of MPP tracks/String per MPP tracker(A/B)			2/(2/1)	
<b>BAT Input</b>				
Battery voltage range[V]			180-650	
Nominal charge/discharge current[A]			30/30	
<b>AC Grid Input</b>				
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		
<b>AC Grid Output</b>				
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		
<b>EPS(Off-grid) Output</b>				
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		
<b>EFFICIENCY</b>				
MPPT Max. efficiency[%]		99.9		
Euro efficiency[%]		96.1		
Max efficiency[%]		97.7		
Battery charge/discharge efficiency[%]		98.5(PV-BAT), 97(BAT-AC)		
<b>ENVIRONMENT LIMIT</b>				
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[°C]		-20~60(derating at 45)		
Max. operation altitude[m]		<3000		
Humidity		0-95%		
Storage temperature[°C]		-40~70		
Typical noise emission[dBA]		<45		
Communication with BMS		CAN / RS485		
Communication with Meter		RS485		
Communication with Portal		RS485		
<b>DIMENSION AND WEIGHT</b>				
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		
<b>Standard warranty[years]</b>		<b>10</b>		