



HANCHU ESS

25, 36, 50kWh C&I ESS Three Phase Hybrid

Product Introduction



25K Hybrid

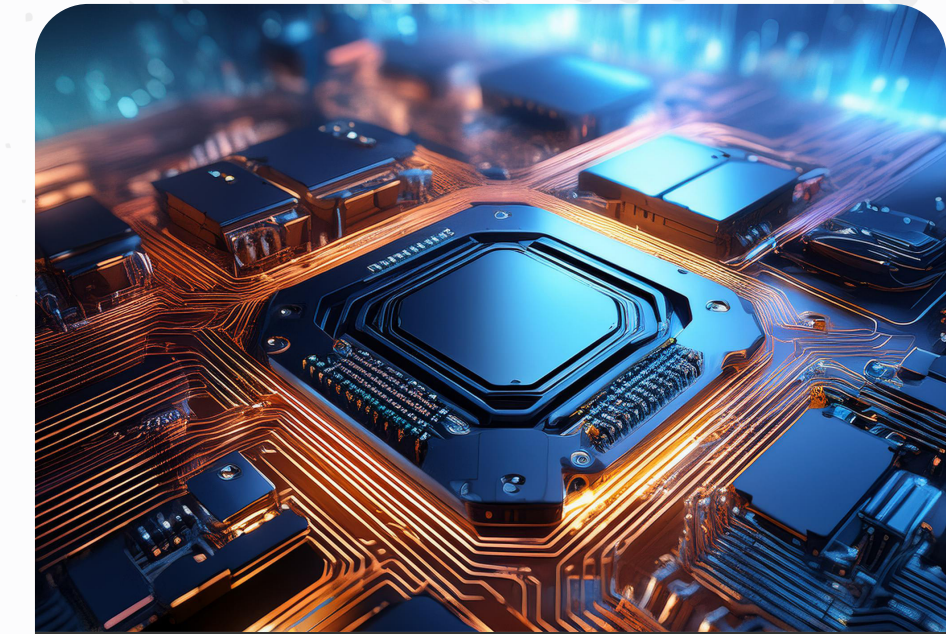
37000kWp max. DC power
100A/100A Charge & Discharge Rate
Battery Voltage Range 135-750v
No. of MPP Trackers - 4
No. of DC Inputs Per MPPT - 2
MPPT Efficiency - 98.80%
Communication with portal - Wifi / LAN /4G / Bluetooth
12 Years Warranty - Without Additional Costs
Battery Type - Hanchu 2.7HV, Hanchu 5.3HV & Hanchu 9.4HV
IP66 rating
G99 & G100 Certified
Dimensions 620H x 300D x 800W (mm)

36K Hybrid

54000kWp max. DC power
100A/100A Charge & Discharge Rate
Battery Voltage Range 135-750v
No. of MPP Trackers - 4
No. of DC Inputs Per MPPT - 2
MPPT Efficiency - 98.80%
Communication with portal - Wifi / LAN /4G / Bluetooth
12 Years Warranty - Without Additional Costs
Battery Type - Hanchu 2.7HV, Hanchu 5.3HV & Hanchu 9.4HV
IP66 rating
G99 & G100 Certified
Dimensions 620H x 300D x 800W (mm)

50K Hybrid

75000kWp max. DC power
100A/100A Charge & Discharge Rate
Battery Voltage Range 135-750v
No. of MPP Trackers - 4
No. of DC Inputs Per MPPT - 2
MPPT Efficiency - 98.80%
Communication with portal - Wifi / LAN /4G / Bluetooth
12 Years Warranty - Without Additional Costs
Battery Type - Hanchu 2.7HV, Hanchu 5.3HV & Hanchu 9.4HV
IP66 rating
G99 & G100 Certified
Dimensions 620H x 300D x 800W (mm)

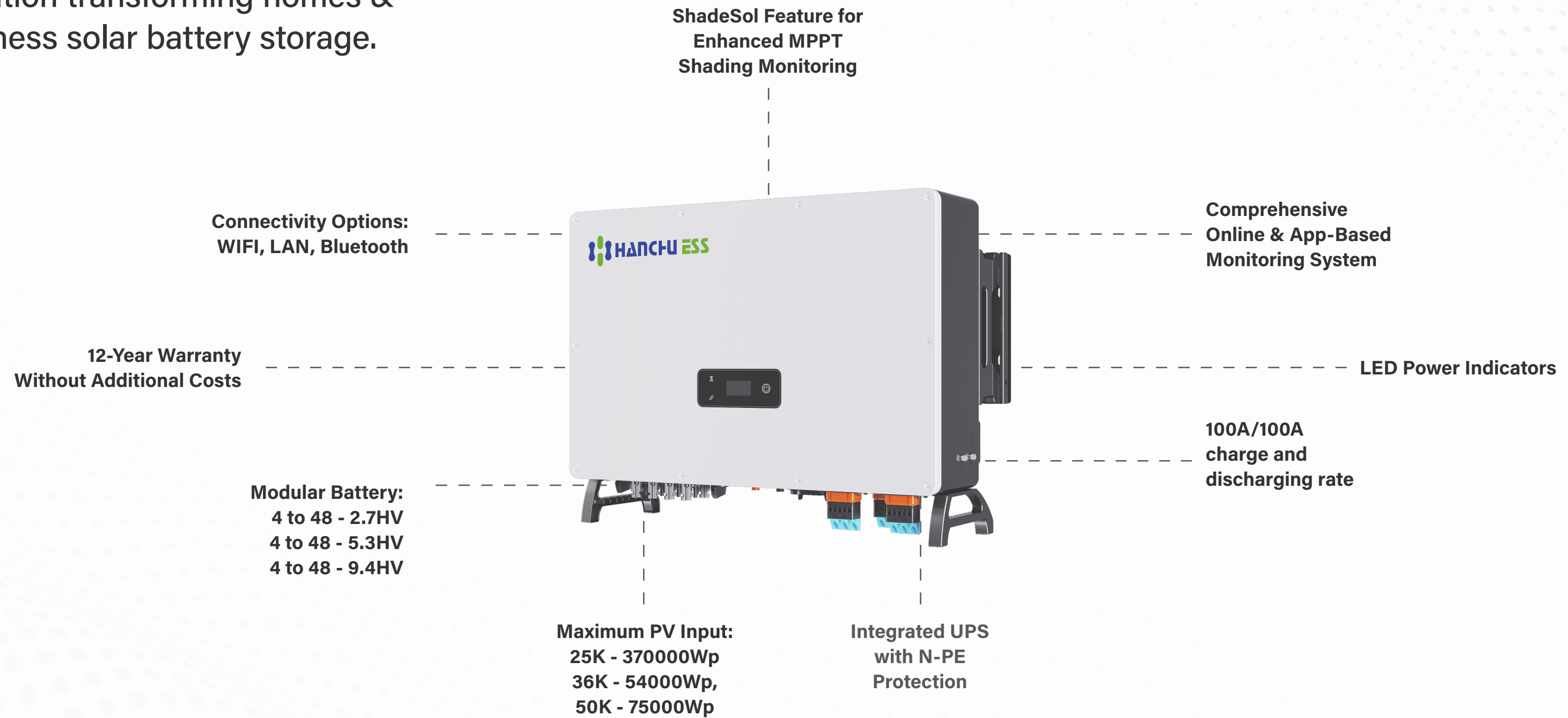


Intelligent.

Reduce your expenses significantly through intelligent, Eco-friendly energy strategies. By adopting Hanchu Battery technology, you have the opportunity to supply your residential or commercial spaces with power in a manner that is both cost-effective and environmentally sustainable.

Three Phase CESS Hybrid Battery Key Features

Meet the High Power Three Phase Hybrid solution transforming homes & Small Business solar battery storage.



Why Hanchu?



Plug and Play Installation

The Hanchu controller units are extremely simple to install and connect with the Hanchu batteries. Simple connections with simple installation processes means faster successful installations. All cables required are provided with every controller and every battery. Flexible additions are available where installations are non-standard.

Free Monitoring Platform

The Hanchu monitoring is extremely simple for installers to set up. Installers have wide ranging access to the background data of both the Hanchu controller units, and each individual battery can be monitored. Interactive monitoring allows manufacturers to offer technical support and future proofing of the installations. Customers have an extremely simple and comprehensive version of the monitoring allowing all the access they need to monitor and control their installation.

Industry Leading Warranty

The Hanchu warranties are for up to 12 years product cover. In the UK Infinity Innovations will support installers to action any warranty claims for customers. The process is simple and swift, and the warranty is straight forwards and uncomplicated. Registration is online giving simple flow to the process of registering a warranty.

Outstanding Performance

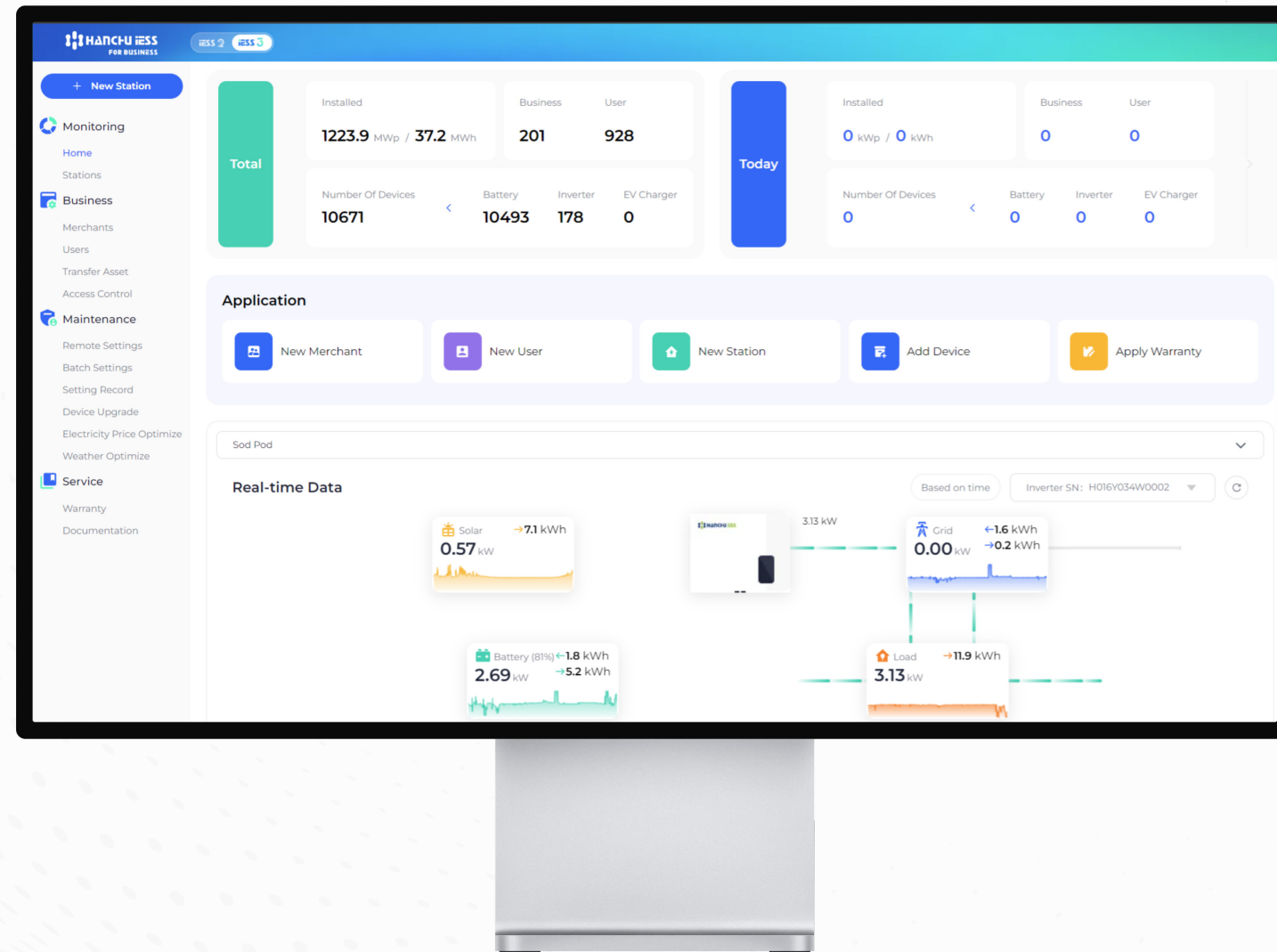
Hanchu have an extensive R & D department developing industry leading technology for the UK market. Hanchu lead the world in the development of batteries with integrated fire suppression systems. The Hybrid systems offer excellent power inputs for solar arrays, and excellent charge and discharge rates for harvesting and delivering power to the property.

UK Training And Support

Infinity Innovations Ltd. have a full training and support centre dedicated to delivering training, support and product development for Hanchu products. As well as many online support videos, training in person or via Zoom is a daily occurrence to help installation companies carry our large numbers of accurate installations.



Hanchu ESS Web-Portal Monitoring - Your In Control



Hanchu Portal

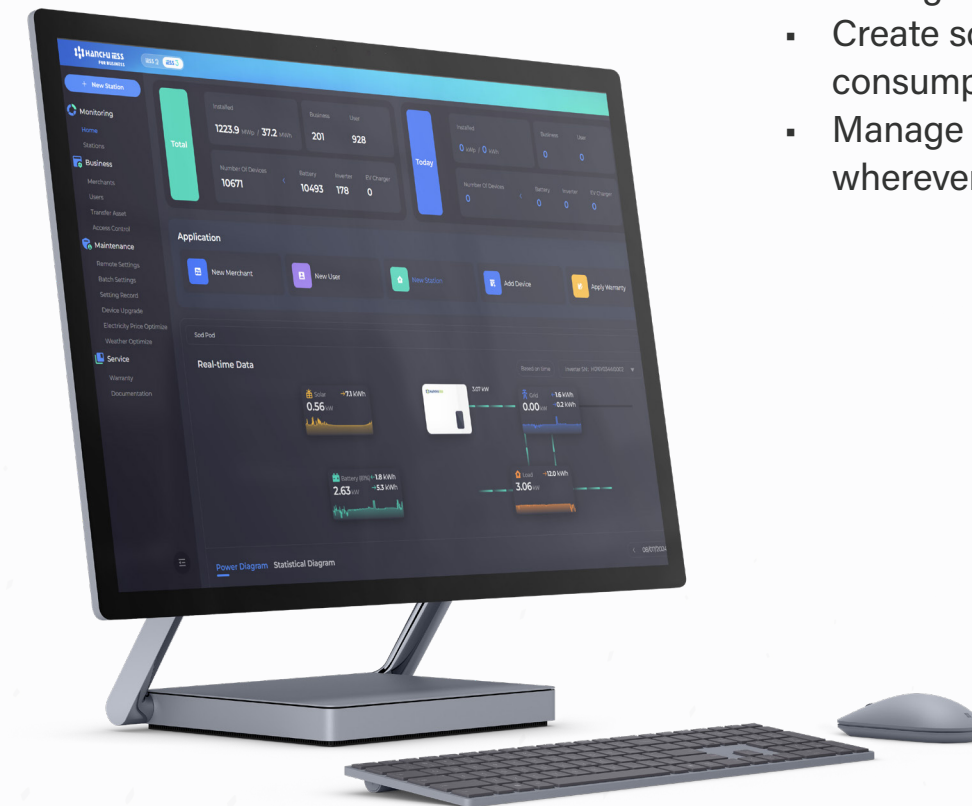
Gain complete mastery over your energy consumption with the Hanchu portal. This intuitive online platform simplifies the task of energy management by offering you the ability to closely monitor, efficiently manage, and thoroughly analyze your energy system from any location. With Hanchu, access to real-time data and analytics is at your fingertips, enabling you to make informed decisions about your energy use and optimize your system's performance directly through the cloud.

Unparalleled Data Access

1. A personalized dashboard tailored to your specific configuration
2. Charts that show your electricity and energy consumption
3. Both succinct data and comprehensive power metrics readily available
4. Program schedules and timers to optimize your energy consumption based on your daily routine
5. User-friendly, updates automatically over the air, and perpetually free

Unparalleled Control

- Keep track of all your electronic devices from a single location.
- Utilize API access for personalized automation settings.
- Create schedules and timers to tailor your energy consumption to fit your daily routine.
- Manage your system remotely, whenever and wherever you choose.
- Keep track of all your electronic devices from a single location.
- Utilize API access for personalized automation settings.
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Hanchu ESS App Monitoring - Your In Control



App Monitoring

Take command of your power consumption with the Hanchu portal. Simplify your energy oversight - enabling the monitoring, management, and analysis of your setup via the cloud.

Put the control of your energy right into your palms. Available for download at no cost. Easily access essential details about your household's energy needs, solar PV output, and energy imported from the grid.

Accessible on Google Play and the App Store. Make straightforward decisions as your day unfolds. Stay connected, whether you're on your Android phone or iPhone. Keep saving and enhancing your energy efficiency.

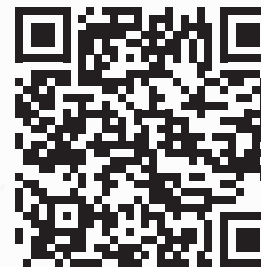
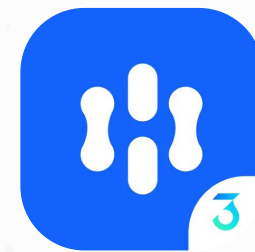
Regularly updated by a very committed Hanchu software team every day to enhance your user experience continuously.

Works With Octopus Energy.

Hanchu have taken a step further in affordability and efficiency by collaborating with Octopus Energy's economical tariffs, ensuring you benefit from lower energy costs.

Weather Prediction Technology.

Hanchu have integrated advanced weather prediction technology into their systems. This innovative feature enables further savings by optimizing energy usage based on forecasted weather conditions, ensuring you're not only choosing a premium energy management solution but one that's deeply committed to maximizing your savings at an accessible price point.




Hanchu ESS

C&I ESS Datasheet



Type Designation	CESS-HY-25K	CESS-HY-36K	CESS-HY-50K
PV Input			
Max. Input Power (kW)	37.5	54.0	75.0
Start-up Voltage (V)	135		
Max. DC Input Voltage (V)*	1000		
Rated DC Input Voltage (V)	620		
MPPT Voltage Range (V)	200-850		
No. of MPP Trackers	4		
No. of DC Inputs per MPPT	2		
Max. Input Current (A)	30×4		
Max. Short-circuit Current (A)	40×4		
Battery Side			
Battery Type	Lithium Battery (with BMS)		
Battery Voltage Range (V)	135-750		
Max. Charge/Discharge Current (A)	100/100		


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Type Designation	CESS-HY-25K	CESS-HY-36K	CESS-HY-50K
Grid Side			
Rated Output Power (kW)	25.0	36.0	50.0
Max. Output Apparent Power (kVA)	27.0	39.6	55.0
Max. Input Apparent Power (kVA)**	30.0	43.5	60.0
Max. Charging Power of Battery (kW)	25.0	36.0	50.0
Rated AC Voltage (V)	3L/N/PE; 220/380V; 230/400V; 240/415V		
Rated AC Frequency (Hz)	50/60		
Max. Output Current (A)	42.0	60.0	83.0
Power Factor	0.8 leading ... 0.8 lagging		
Max. Total Harmonic Distortion	<3% @Rated output power		
DCI	<0.5%In		

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C&I ESS Datasheet



Type Designation	CESS-HY-25K	CESS-HY-36K	CESS-HY-50K
Protection			
DC Reverse Polarity Protection		Integrated	
Battery Input Reverse Connection Protection		Integrated	
Insulation Resistance Protection		Integrated	
Surge Protection		Integrated	
Over-temperature Protection		Integrated	
Residual Current Protection		Integrated	
Islanding Protection		Integrated	
AC Over-voltage Protection		Integrated	
Overload Protection		Integrated	
AC Short-circuit Protection		Integrated	


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C&I ESS Datasheet



Type Designation	CESS-HY-25K	CESS-HY-36K	CESS-HY-50K
General Data			
Over Voltage Category		PV: II; Main: III	
Dimensions (WxHxD mm)		800x620x300	
Weight (KG)		72.0	
Protection Degree		1P65	
Standby Self-consumption (W)		<15	
Topology		Transformerless	
Operating Temperature Range (°C)		-30*60	
Relative Humidity (%)		0-100	
Operating Altitude (m)		3000 (>3000mderating)	
Cooling		Smart Fan	
Noise Level (dB)		<50	
Display		OLED & LED	
Communication		CAN, RS485,WiFi/LAN (Optional)	

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Operating Temperature Range (°C)	-30*60		
Relative Humidity (%)	0-100		
Operating Altitude (m)	3000 (>3000mderating)		
Cooling	Smart Fan		
Noise Level (dB)	<50		
Display	OLED & LED		
Communication	CAN, RS485,WiFi/LAN (Optional)		

Key

* Max. operating DC voltage is 950V, max. withstanding DC voltage is 1000V

** Max apparent power from the grid means the maximum power imported from the utility grid used to satisfy the backuploads and charge the battery

*** The output power will exceed the rated value only when the power in the PV array is sufficient, and the duration of the overload is related to the overload power

1) AS 4777.2: 30.0kVA; 2) AS 4777.2: 43.5A

Continue onto next page



Join **Hanchu ESS** Today and Build a Perfect Partnership

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