



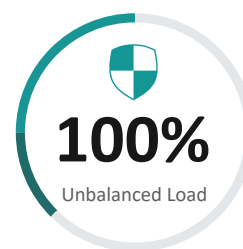
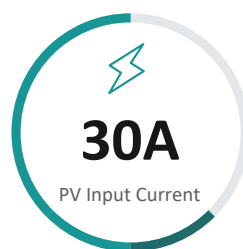
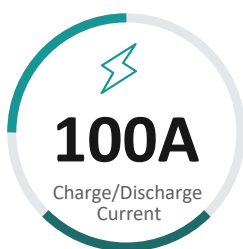
C&I Series Hybrid Inverter

SMART ENERGY
SUSTAINABLE SOLUTIONS



25-50KW Hybrid Inverter

Commercial | Three Phase | HV Battery | 4 MPPTs



Talented

- 98.8% max. efficiency
- 135-750V super wide battery voltage range
- Max. 100A charge/discharge current
- Max. 30A PV input current
- Within 20ms UPS-level switching

Reliable

- IP65 protection degree
- Compact and elegant appearance with advanced structure design
- Long-term efficient operation with advanced heat dissipation design
- Outstanding working performance thanks to HANCHU platform

Powerful

- Up to 100% unbalanced load
- Up to 110% AC output overloading
- Max. 120% back-up output overloading @60s
- Parallel operation capacity support system size from KW to MW level

Friendly

- Convenient installation and O&M with horizontal design and quick plug terminals
- Easy data check via both OLED display and App
- Intelligent energy management with HANCHU built-in EMS
- Easy Wifi configuration via App

C&I Series Hybrid Inverter

Type Designation	CESS-HY-25K	CESS-HY-30K	CESS-HY-36K	CESS-HY-40K	CESS-HY-50K
PV Input					
Max. Input Power	37.5kW	40.5kW	54.0kW	60.0kW	75.0kW
Start-up Voltage	135V				
Max. DC Input Voltage *	1000V				
Rated DC Input Voltage	620V				
MPPT Voltage Range *	200-850V*				
No. of MPP Trackers	4				
No. of DC Inputs per MPPT	2				
Max. Input Current	30×4A				
Max. Short-circuit Current	40×4A				
Battery Side					
Battery Type	Lithium Battery (with BMS)				
Battery Voltage Range	135-750V				
Max. Charge/Discharge Current	100/100A				
Grid Side					
Rated Output Power	25.0 kW	30.0 kW	36.0 kW	40.0 kW	50.0 kW
Max. Output Apparent Power	27.0kVA	33.0/30.0 ¹⁾ kVA	39.6kVA	44.0kVA	55.0kVA
Max. Input Apparent Power **	30.0kVA	36.0kVA	43.5kVA	48.0kVA	60.0kVA
Max. Charging Power of Battery	25.0 kW	30.0 kW	36.0 kW	40.0 kW	50.0 kW
Rated AC Voltage	3L/N/PE; 220/380V; 230/400V; 240/415V				
Rated AC Frequency	50 Hz / 60 Hz				
Max. Output Current	42.0 A	50.0/43.5 ²⁾ A	60.0 A	66.0 A	83.0 A
Power Factor	0.8 leading ... 0.8 lagging				
Max. Total Harmonic Distortion	<3% @Rated output power				
DCI	<0.5%In				
Back-up Side					
Rated Output Power	25.0kW	30.0kW	36.0kW	40.0kW	50.0kW
Max. Output Apparent Power	27.5 kVA	33.0 kVA	39.6 kVA	44.0 kVA	55.0 kVA
Max. Output Current	42.0A	50.0 A	60.0 A	66.0 A	83.0 A
UPS Switching Time	<20ms				
Rated Output Voltage	3L/N/PE; 220/380V; 230/400V; 240/415V				
Rated Output Frequency	50 Hz / 60 Hz				
Peak Output Apparent Power***	30, 60s kVA	36, 60s kVA	43.5, 60s kVA	48, 60s kVA	60, 60s kVA
Voltage Harmonic Distor on	<3% @Linear load				
Efficiency					
Max. Efficiency	98.8 %				
European Efficiency	98.3 %				

C&I Series Hybrid Inverter

Type Designation	CESS-HY-25K	CESS-HY-30K	CESS-HY-36K	CESS-HY-40K	CESS-HY-50K
Protec on					
DC Reverse Polarity Protec on	Integrated				
Ba ery Input Reverse Connec on Protec on	Integrated				
Insula on Resistance Protec on	Integrated				
Surge Protec on	Integrated				
Over-temperature Protec on	Integrated				
Residual Current Protec on	Integrated				
Islanding Protec on	Integrated				
AC Over-voltage Protec on	Integrated				
Overload Protec on	Integrated				
AC Short-circuit Protec on	Integrated				
General Data					
Over Voltage Category	PV: II; Main: III				
Dimensions (W×H×D)	800*620*300mm				
Weight	76.0kg				
Ingress Protec on Degree	IP65				
Standby Self-consump on	<15W				
Topology	Transformerless				
Opera ng Temperature Range	-30~60℃				
Rela ve Humidity	0-100%				
Opera ng Al tude	3000m (>3000mdera ng)				
Cooling	Smart Fan				
Noise Level	<50dB				
Display	OLED & LED				
Communica on	CAN, RS485,WiFi/LAN (Op onal)				
Cer fica ons	IEC 62109/EN 61000/EN50549-1/NTS/VDE-4105/G99/G100/CEI/NRS097/ CEI 0-21/NEN				
Warranty	10 years				

* Max. operating DC voltage is 850V, 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 backup loads 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