

# C&I All-in-one Hybrid ESS

< 20<sub>ms</sub>

PV&ESS&Generator  
UPS-level Switchover

IP55

Fast Installation  
Modular Design

All-in-1

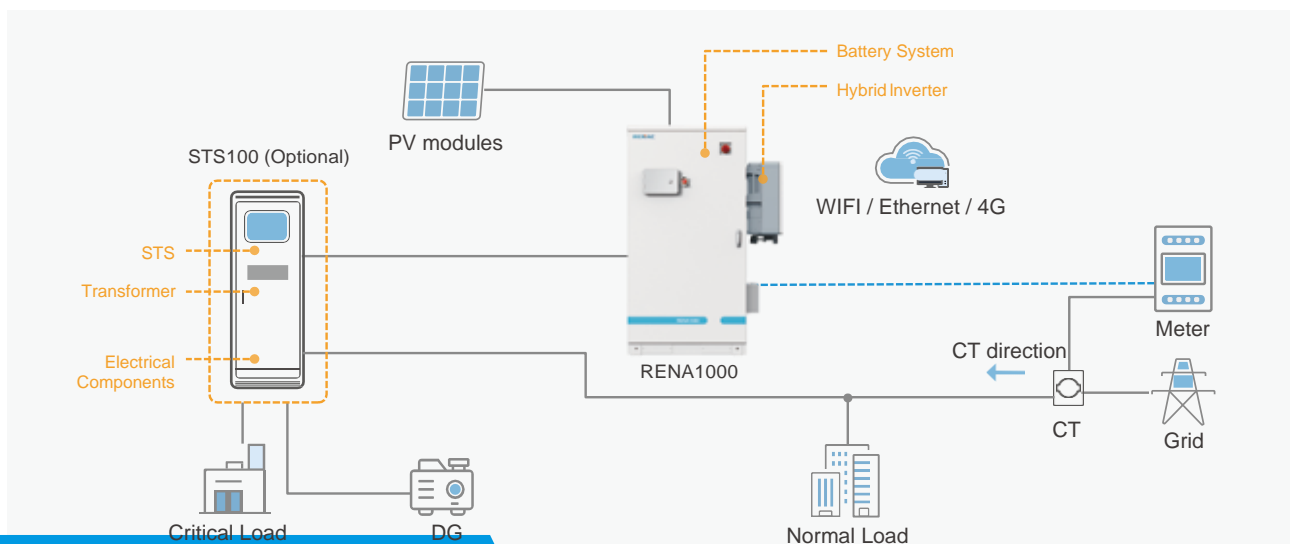
PV&ESS Highly  
Integrated



## CE1000

50kW | 83.6kWh / 94kWh / 104.4kWh

- ▶ PV&ESS, Generator and grid 3-way powersupply
- ▶ Cell / Pack / Cluster / System level protection
- ▶ Intelligent battery module temperature management
- ▶ Smart EMS and multi-scenario operation



System Model		CE1000-E		
Inverter Model		N3-49.9K		N3-50K
<b>PV Input</b>				
Max. Recommended PV Power [Wp]		75000		
Max. PV Input Voltage [V]		1000		
MPPT Voltage Range [V]		350 ~ 800		
Rated PV Input Voltage [V]		667		
Start-up Voltage [V]		350		
No. of MPP Trackers		3		
No. of Input Strings per Tracker		2 / 2 / 2		
Max. PV Input Current [A]		36 / 36 / 36		
Max. Short-circuit Current [A]		40 / 40 / 40		
<b>AC Output</b>				
Max. AC Output Apparent Power [VA]		54890		55000
Max. AC Output Active Power [W]		49900		50000
Max. AC Output Current [A]		79.6		80.0
Rated AC Output Current [A]		72.4		72.5
Rated AC Output Voltage [V]		3 / N / PE, 230 / 400		
Grid Frequency [Hz]		50 / 60		
Adjustable Power Factor [cos φ]		1 (0.9 leading ~ 0.9 lagging)		
Output THDi (@Rated Output)		< 3%		
<b>AC Input</b>				
Max. AC Input Apparent Power [VA]		54890		55000
Max. AC Input Active Power [W]		49900		50000
Max. AC Input Current [A]		79.6		80.0
Rated AC Input Voltage [V]		3 / N / PE, 230 / 400		
Grid Frequency [Hz]		50 / 60		
<b>Battery Model</b>				
	<b>BS80-E</b>	<b>BS90-E</b>	<b>BS100-E</b>	
Battery Technology	LiFePO <sub>4</sub>	LiFePO <sub>4</sub>	LiFePO <sub>4</sub>	
Nominal Capacity [Ah]	204 (102 * 2)	204 (102 * 2)	204 (102 * 2)	
Battery Configuration	16S2P * 8	16S2P * 9	16S2P * 10	
Nominal Energy [kWh]	83.6	94	104.4	
Nominal Voltage [V]	409.6	460.8	512	
Voltage Range [V]	358.4 ~ 467.2	403.2 ~ 525.6	448 ~ 584	
Max. Continuous Charging / Discharging Current [A]	102 / 102	102 / 102	102 / 102	
Nominal Power [kW]	41.8	47	52.2	
Depth of Discharge	95%	95%	95%	
<b>System General Data</b>				
Dimensions (with Inverter) (W * H * D) [mm]	1330 * 1950 * 1425			
Dimensions (without Inverter) (W * H * D) [mm]	1000 * 1950 * 1425			
Weight (with Inverter) [kg]	1227	1313.5	1400	
Weight (without Inverter) [kg]	1152	1238.5	1325	
Ambient Temperature Range [°C]	-20 ~ +55			
Relative Humidity	0 ~ 95%			
Operation Altitude [m]	≤ 2000			
Topology	Transformerless			
Cooling	Air-conditioner			
Fire Protection	Aerosol			
Communication	CAN, RS485, USB Update, WiFi, 4G, Ethernet			
Ingress Protection	Cabinet: IP55; Inverter: IP65			
Cycle Life	6000 @90% DOD / 25°C / 0.5C			
<b>Certifications &amp; Standards</b>				
Grid Regulation	EN 50549-1, CEI 0-21, VDE4105, NRS 097-2-1			
Safety Regulation	IEC 62619, EN 62477-1, IEC 62109-1, IEC 62109-2, IEC62477-1, EN 62109-1, EN 62109-2			
EMC	EN / IEC 61000-6-2, EN / IEC 61000-6-4, EN IEC 61000-3-11, EN 61000-3-12			