

C&I ESS

RENA1000 Series

RENA1000-E (50kW / 104.4kWh)



Extreme safety

Three level protection.
IP55 outdoor design.
Battery life cycle management.



Intelligent and friendly

Remote real-time data monitoring.
Remote control and firmware upgrade.
Realize pre-alarm and faults location.



High cycle life

Pack-level optimization
High precision SOX algorithm
Smart temperature management



Flexible configuration

Smart EMS and multi-scenario operation.
Support EPS-level switching and microgrid operation
PV solar and Battery Energy Storage System(BESS)
highly integrated.



Model

RENA1000-E

PV Input Data

Max. Input Voltage	1000V
MPPT Voltage Range	350 ~ 800V
No. of MPPT Trackers	3
No. of Input Strings per Tracker	2 / 2 / 2
Max. Input Current	36A / 36A / 36A

AC Output Data(On Grid)

Rated AC Power	50kW
Max. AC Power	55kVA
THDI	< 3% (Rated Power)
Max. AC Current	80A
Rated AC Voltage/Voltage Range	3L + N + PE, 230 / 400V; 340 ~ 440V
Rated Grid Frequency/Frequency Range	50Hz; 45 ~ 55Hz
Isolation Transformer	Optional
Power Factor	-1 ~ 1

AC Output Data(Off Grid)

Rated AC Voltage	230 / 400 $\pm$ 3%; 3L + N + PE
THDv	< 3% (Linear Load)
Rated Grid Frequency	50 / 60Hz
Rated AC Power	50kW
Max. AC Power	55kVA

Battery Data

	BS80-E	BS90-E	BS100-E
Cell Type		LF100LA / 102Ah	
System Battery Configuration	16S2P*8	16S2P*9	16S2P*10
Capacity	83.6kWh	94kWh	104.4kWh
Normal Voltage	409.6V	460.8V	512V
Voltage Range	368.4~467.2V	403.2~525.6V	448~584V
Charge/Discharge Rate		$\leq$ 0.5C	
DOD		95%	
Size (Width*Hight*Depth)		1000 * 1950 * 1420mm	
Weight	1152kg	1238.5kg	1325kg

General Parameters

Enclosure	IP55
Cooling	Air-conditioner
BMS Communication Port	CAN
Operation Temperature Range	-20 ~ +55°C
Operation Humidity	0 ~ 95%
Operation Altitude	$\leq$ 2000
Cycle Life	6000@90% DOD / 25% / 0.5C
Standards	UN38.3, IEC / EN 62619, IEC / EN 61000, EN 62477

System Diagram

