RoyPow®
Get powered. Get inspired

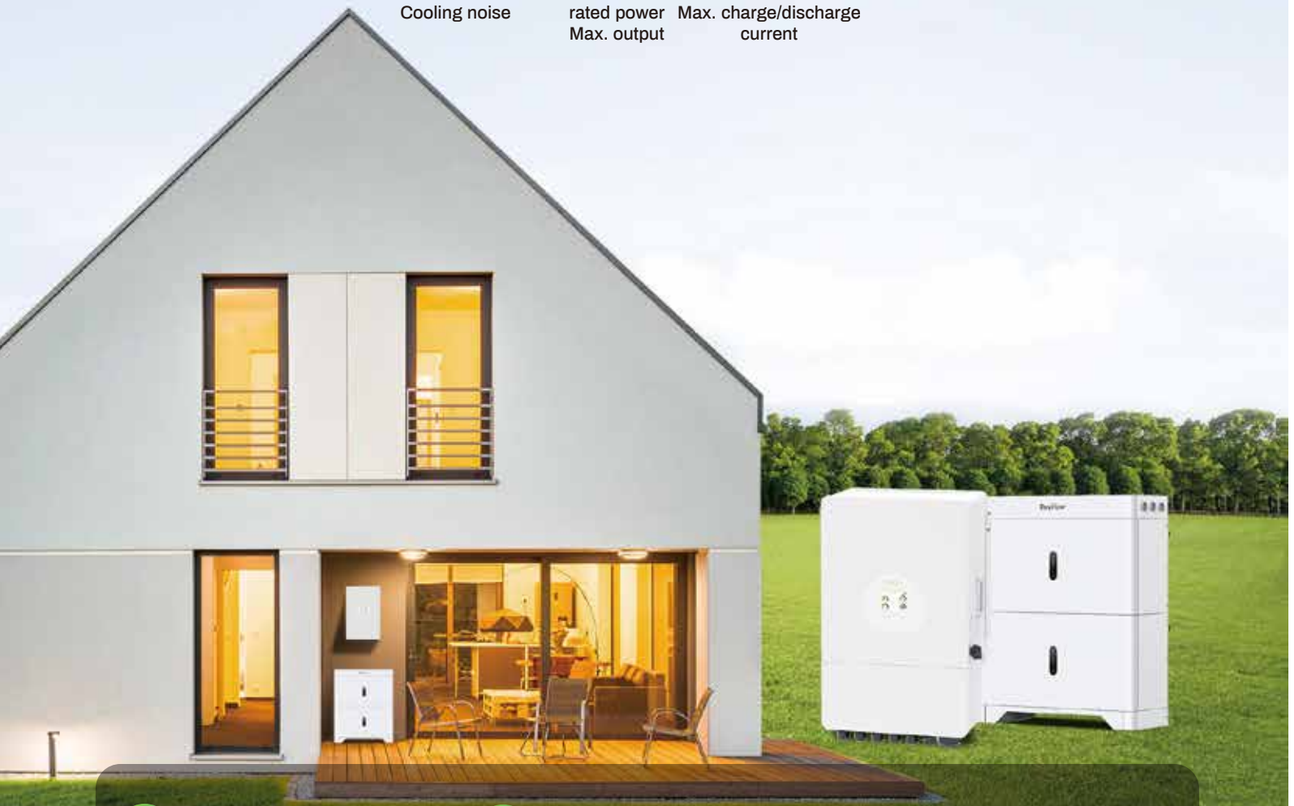
LI-ION technology

SUN10000T-E 10 kW - 10 kWh

Residential Energy Storage System

97.6%	Up to 10 years	IP65	5 years
Max. efficiency	Design life	Rating	warranty

< 45dB	Up to 50%	240A
Cooling noise	rated power Max. output	Max. charge/discharge current



- 100% unbalanced output of each phase
- DC / AC couple to retrofit existing solar system
- Support parallel working (up to 10 pcs) & generator access
- Modular design, easy & flexible battery expansion
- 48 V low voltage battery, transformer isolation design
- 6 time periods for battery charge / discharge

www.roypowtech.com sales@roypowtech.com

SUN10000T-E Technical specifications

PV string input data			
Max. DC input power	13,000 W	Rated PV input voltage	550 V (160 V ~ 800 V)
Start-up voltage	160 V	MPPT voltage range	200 V ~ 650 V
PV input current	26 A + 13 A	Max. PV ISC	34 A + 17 A
No.of MPP Trackers	2	No.of strings per MPP Tracker	1
Full load DC voltage range	350 V ~ 650 V		

AC output data			
Rated AC output & UPS power	10,000 W	Max. AC output power	11,000 W
AC output rated current	15.2 A / 14.5 A	Max. AC current	22.7 A / 21.7 A
Max. continuous AC passthrough	45 A	Peak power (off grid)	2 time of rated power, 10 s
Power factor	0.8 leading to 0.8 lagging	Total Harmonic Distortion (THD)	< 3% (of nominal power)
Grid type	Three phase	DC current injection	< 0.5% In
Output frequency & voltage	50 / 60 Hz; 3L / N / PE 220 / 380, 230 / 400 Vac		

Efficiency			
Max. efficiency	97.6%	Euro efficiency	97%
MPPT efficiency	99.9%		

Protection	
Output over voltage protection	DC Type II / AC Type III
Integrated	PV input lightning protection, anti-islanding protection, PV string input reverse polarity protection, insulation resistor detection, residual current monitoring unit, output over current protection, output shorted protection, surge protection

Certifications	
Max. efficiency	VDE4105, IEC61727/62116, VDE0126, AS4777.2, CEI 0 21, EN50549-1, G98, G99, C10-11, UNE217002, NBR16149/NBR16150
Safety EMC / standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2

Battery model			
Battery type	Lithium iron phosphate (LFP)		
Nominal energy	10.2 kWh	Usable energy [1]	9.5 kWh
Nominal voltage	51.2 V	Operating voltage range	44.8 V ~ 56.8 V
Battery voltage range	40 V ~ 60 V	Max. charging current	100 A（can be set）
Max. discharging current	210 A	External temperature sensor	Yes
Weight	211.6 lbs (96 kg)	Dimension (W x D x H)	25.6 x 9.4 x 31.7 inch (650 × 240 × 805 mm)
Charging curve	3 Stages / Equalization		
Charging strategy for li-ion battery	Self-adaption to BMS		

General data	
Operating temperature range	40°F ~ 140°F (-40°C ~ 60°C), 113°F (45°C) derating
Cooling noise	< 45 dB, smart cooling
Communication with BMS	RS485; CAN
Protection degree	IP65
Installation	Wall-mounted
Warranty	5 / 10 Years (optional)

[1] Test method: under STC condition, discharge to 2.5 V with a constant current of 0.5 c, rest 30 minutes; charge to 3.65 V with a constant current of 0.5 c, rest 5 minutes, then charge to 3.65 V with a constant current of 0.05 c and rest 30 minutes. Discharge with a constant current of 0.5 c till the voltage is 2.5 V.
Information may be subject to change without notice during product improving. For the latest product specs, please refer to RoyPow website: www.roypowtech.com

All pictures shown are for reference only and data are based on RoyPow standard test procedures. Actual performance may vary according to local conditions.

www.roypowtech.com sales@roypowtech.com