

CHS2 All In One Hybrid Energy Storage System

Better Performance

- String current 22.5A, matching high power (210) PV panel
- 6 MPPT, support 200% oversizing
- Adopting C&I 280Ah cell, good performance and higher energy density
- Built-in STS function, on-off grid switch in 20ms



Ultimate Safety

- AFCI as standard to prevent fire
- Support core health warning, CO, fire detection, cabinet-level fire protection
- AC and DC type II SPD



Highly Integrated

- Pre-installed in the factory, no need for on-site installation and debugging
- Accessing to DG(diesel generator), no need for additional equipment
- AC coupling available



Higher Revenue

- PV and Battery are dc coupled with high efficiency
- Wide environmental adaptability improves VPP revenue
- Intelligent scheduling, and multiple scheduling modes



MODEL	CHS2-29.9K-T4-X	CHS2-30K-T4-X	CHS2-50K-T6-X
DC Input			
Max. PV Array Power [Wp]@STC	59998	60000	100000
Max. DC Voltage [V]		1000	
MPPT Voltage Range [V]		180 ~ 850	
Rated DC Voltage [V]		600	
Start Voltage [V]		200	
Max.DC Input Current [A]	4*45	4*45	6*45
Max.DC Short Circuit Current [A]	4*55	4*55	6*55
Number of Strings per MPPT	2	2	2
Battery Parameters			
Battery Type		LiFePO4	
Rated Energy [kWh]		100.3	
Max.Charging/Discharging Current [A]		150	
AC Output [On-grid]			
Rated AC Power [W]	29999	30000	50000
Max.Apparent Power[VA]	29999	33000	55000
Rated Output Current[A]@230V	43.3	43.5	72.5
Max. Output Current [A]@230V	43.3	47.9	79.8
Rated AC Voltage [V]		3+N+PE, 380/ 400	
Rated Output Frequency/Range [Hz]		50,45 ~ 55	
Power Factor [cos φ]		0i - 1 - 0c	
Total Harmonic Distortion [THDi]		<3%	
AC input [On-grid]			
Rated AC Voltage/Range [V]		3+N+PE, 380/ 400	
Rated Output Frequency [Hz]		50	
Max. Input Current [A]		200	
AC Output [Back-up]			
Max.Output Power [VA]	29999	33000	55000
Peak Output Apparent Power [VA]	29999	45000,5s	75000,5s
Rated AC Voltage [V]		3+N+PE, 380/ 400	
Rated Output Frequency/Range [Hz]		50,45 ~ 55	
Output THDv (@ Liner Load)		<3%	
AC Input [Generator]			
Max. Input Power [W]	29999	30000	50000
Max. Input Current [A]@230V		200	
Rated Input Voltage [V]		3+N+PE, 380/ 400	
Rated Input Frequency/Range [Hz]		50,45 ~ 55	
Efficiency			
Max. Efficiency		98%	
Euro Efficiency		97.3%	
Max. Battery to AC Efficiency		96.0%	
Protection			
PV Reverse Polarity Protection		Integrated	
Anti-islanding Protection		Integrated	
AC Overcurrent Protection		Integrated	
AC Short Circuit Protection		Integrated	
AC Overvoltage Protection		Integrated	
DC switch		Integrated	
DC Surge Protection		II	
AC Surge Protection		II	
AFCI		Integrated	
RSD		Optional	
General Parameters			
Communication		Wi-Fi/Ethernet/RS485	
Topology		Transformerless	
Operating Temperature Range		-30°C to +50°C (45°C to 50°C with derating)	
Cooling Method		Air Conditioner	
Ambient Humidity		5~95%(No Condensing)	
Altitude [m]		2000	
Ingress Protection		IP55, IP66(Inverter)	
Dimensions [H*W*D] [mm]		1980*988*1065	
Weight [kg]		1035(57.3kWh)/1145(71.6kWh)/1255(85.9kWh)/1365(100.3kWh)	
Warranty [Year]		10	
Standard		VDE4105, IEC61727/62116, VDE0126, AS4777.2, CEI 0 21, EN50549-1, G98, G99, C10-11, UNE217002, NBR16149/NBR16150, IEC62109-1/-2, NBT32004-2018, EN61000-6-1,EN61000-6-2,EN61000-6-3, EN61000-6-4	