

CHS2 All-in-One Hybrid Energy Storage System

CHS2 is suitable for various scenarios such as large residential areas, supermarkets, farms, and small factories. It integrates functions including power generation, conversion, storage, and utilization. With its high-end hardware configuration and intelligent IoT software, CHS2 supports various application modes such as self-consumption, time-of-use, and backup mode. It meets daily usage scenarios and can also connect with other devices such as diesel generators, helping owners achieve more stable, secure, and economical electricity needs.



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

CHS2-29.9K-T4-X | CHS2-30K-T4-X | CHS2-49.9K-T6-X | CHS2-50K-T6-X

MODEL	CHS2-29.9K-T4-X	CHS2-30K-T4-X	CHS2-49.9K-T6-X	CHS2-50K-T6-X
DC Input				
Max. PV Array Power [Wp]@STC	59998	60000	99998	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	6*45
Max.DC Short Circuit Current [A]	4*55	4*55	6*55	6*55
Number of Strings per MPPT	2	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	49999	50000
Max.Apparent Power[VA]	29999	33000	49999	55000
Rated Output Current[A]@230V	43.3	43.5	72.1	72.5
Max. Output Current [A]@230V	43.3	47.9	72.1	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	49999	55000
Peak Output Apparent Power [VA]	29999	45000,5s	49999	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]	138000	138000	138000	138000
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	