

CHS2

C & I ALL-IN-ONE ENERGY STORAGE SOLUTIONS



CHS2-29.9K-T4-X | CHS2-30K-T4-X | CHS2-40K-T5-X
CHS2-50K-T6-X | CHS2-63K-T6-X

CHS2 is suitable for large residential or small industrial and commercial scenarios. This inverter can support 200% photovoltaic over-allocation, which can supply power to loads and charge batteries at the same time, effectively reducing additional grid demand and strengthening the independence of green energy. CHS2 also adopts high-performance, safe and reliable industrial and commercial 280Ah lithium iron phosphate batteries, supporting 0.5C charge and discharge, and supports a variety of application modes such as self-consumption, time-of-use electricity price and backup power, which greatly meets daily use scenarios. The inverter integrates dry contacts, which can flexibly control external loads such as heat pumps to optimize energy consumption. Compatible with generator access, CHS2 is also suitable for scenarios where the power grid is unstable or there is no power grid, such as micro power grids and isolated islands.

MODEL	CHS2-29.9K-T4-X	CHS2-30K-T4-X	CHS2-40K-T5-X	CHS2-50K-T6-X	CHS2-63K-T6-X
DC Input					
Max. PV Array Power [Wp]@STC	59800	60000	80000	100000	126000
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		5*45		6*45
Max.DC Short Circuit Current [A]	4*56.5		5*56.5		6*56.5
Number of Strings per MPPT	2		2		2
Battery Parameters					
Battery Type	LiFePO4				
Rated Energy [kWh]	57.3~100.3				
Voltage Range [V]	179.2~403.2				
Max.Charging/Discharging Current [A]	140				
AC Output [On-grid]					
Rated AC Power [W]	29900	30000	40000	50000	63000
Max.Apparent Power[VA]	29900	33000	44000	55000	63000
Rated Output Current[A]@230V	43.3	43.5	58.0	72.5	91.3
Max. Output Current [A]@230V	43.3	47.9	63.8	79.8	91.3
Rated AC Voltage [V]	3+N+PE/ 3+PE, 380/ 400				
Rated Output Frequency/Range [Hz]	50,60/45 ~ 55,55 ~ 65				
Power Factor [cos φ]	0i - 1 - 0c				
Total Harmonic Distortion [THDi]	<3%				
AC input [On-grid]					
Rated AC Voltage/Range [V]	3+N+PE/ 3+PE, 380/ 400				
Rated Output Frequency [Hz]	50,60				
Max. Input Current [A]	150				
AC Output [Back-up]					
Max.Output Power [VA]	29900	33000	44000	55000	63000
Peak Output Apparent Power [VA]	29900	45000,5s	60000,5s	75000,5s	75000,5s
Rated AC Voltage [V]	3+N+PE/ 3+PE,380/ 400				
Rated Output Frequency/Range [Hz]	50,60/45 ~ 55,55 ~ 65				
Output THDv (@ Liner Load)	<3%				
AC Input [Generator]					
Max. Input Power [W]	29900	30000	40000	50000	63000
Max. Input Current [A]@230V	43.3	43.5	58.0	72.5	91.3
Rated Input Voltage [V]	3+N+PE/ 3+PE,380/ 400				
Rated Input Frequency/Range [Hz]	50,60/45 ~ 55,55 ~ 65				
Efficiency					
Max. Efficiency	≥98.0%				
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/CAN/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	2000				
Ingress Protection	IP55, IP66(Inverter)				
Dimensions [H*W*D] [mm]	1980*988*1065				
Weight [kg]	1050(57.3kWh)/1150(71.6kWh)/1250(85.9kWh)/1350(100.3kWh)				
Warranty [Year]	5/10				
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				

CH2 SERIES


HYBRID SOLAR INVERTER



CH2-29.9K-T4 | CH2-30K-T4 | CH2-40K-T5
CH2-50K-T6 | CH2-63K-T6

22.5A Max 22.5A input current to better match high power panel


200% 200% PV oversizing


 AC retrofit & easy installation

10 Parallel connection up to 10PCS, easy for expansion

UPS With UPS function switch time $\leq 10\text{ms}$

100% 100% unbalanced output

 Type II AC & DC surge protection

 Generator compatibility

MODEL	CH2-29.9K-T4	CH2-30K-T4	CH2-40K-T5	CH2-50K-T6	CH2-63K-T6
DC Input					
Max. PV Array Power [Wp]@STC	59800	60000	80000	100000	126000
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		5*45		6*45
Max. DC Short Circuit Current [A]	4*56.5		5*56.5		6*56.5
Number of Strings per MPPT	2		2		2
Battery Parameters					
Battery Type	LiFePO4				
Battery Voltage Range [V]	180 ~ 800				
Max. Charging/Discharging Current [A]	3*50				
AC Output [On-grid]					
Rated AC Power [W]	29900	30000	40000	50000	63000
Max. Apparent Power [VA]	29900	33000	44000	55000	63000
Rated Output Current [A]@230V	43.3	43.5	58.0	72.5	91.3
Max. Output Current [A]@230V	43.3	47.9	63.8	79.8	91.3
Rated AC Voltage/Range [V]	3+N+PE/ 3+PE, 380/ 400				
Rated Output Frequency/Range [Hz]	50,60/45 ~ 55,55 ~ 65				
Power Factor [cos φ]	0i - 1 - 0c				
Total Harmonic Distortion [THDi]	<3%				
AC input [On-grid]					
Rated AC Voltage/Range [V]	3+N+PE/ 3+PE, 380/ 400/ 415				
Rated Output Frequency [Hz]	50,60				
Max. Input Current [A]	150				
AC Output [Back-up]					
Max. Output Power [VA]	29900	33000	44000	55000	63000
Peak Output Apparent Power [VA]	29900	45000,5s	60000,5s	75000,5s	75000,5s
Rated AC Voltage/Range [V]	3+N+PE/ 3+PE,380/ 400				
Rated Output Frequency/Range [Hz]	50,60/45 ~ 55,55 ~ 65				
Output THDv (@ Liner Load)	<3%				
AC Input [Generator]					
Max. Input Power [W]	29900	30000	40000	50000	63000
Max. Input Current [A]@230V	43.3	43.5	58.0	72.5	91.3
Rated Input Voltage [V]	3+N+PE/ 3+PE,380/ 400				
Rated Input Frequency/Range [Hz]	50,60/45 ~ 55,55 ~ 65				
Efficiency					
Max. Efficiency	≥98.0%				
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/CAN/RS485				
Topology	Transformerless				
Operating Temperature Range	-40°C to +60°C (45°C to 60°C with derating)				
Cooling Method	Smart Fan Cooling				
Ambient Humidity	0-100% Non-condensing				
Altitude [m]	3000				
Ingress Protection	IP66				
Dimensions [H*W*D] [mm]	630*630*290				
Weight [kg]	76				
Warranty [Year]	5/10				
Standard	VDE4105, IEC61727/62116, VDE0126, AS4777.2, CEI 0 21, EN50549-1, G98, G99, C10-11, UNE217002, NRS097, NBR16149/NBR16150, IEC62109-1/-2, NBT32004-2018, EN61000-6-1,EN61000-6-2,EN61000-6-3, EN61000-6-4				

CB2 SERIES

C & I ENERGY STORAGE BATTERY SYSTEM



CB2-57.3-HV5 | CB2-71.6-HV5
CB2-85.9-HV5 | CB2-100.3-HV5



Adopting IP55 outdoor cabinet design, easy to transport and install



Adopting high-performance 280Ah lithium iron phosphate battery, safe and reliable



Supporting 4 clusters in parallel, flexible in expansion



All-in-one system design, supporting inverter wall-mounted



Integrating a variety of sensors, and data viewable in the monitoring platform



Integrating aerosol fire extinguishing unit

MODEL	CB2-57.3-HV5	CB2-71.6-HV5	CB2-85.9-HV5	CB2-100.3-HV5
Rated Energy [kWh]	57.3	71.6	85.9	100.3
Usable Energy [kWh]	51.5	64.4	77.3	90.2
Rated Capacity [Ah]	280	280	280	280
No. of Modules	4	5	6	7
Nominal Voltage [V]	204.8	256	307.2	358.4
Voltage Range [V]	179.2~230.4	224~288	268.8~345.6	313.6~403.2
Charge/Discharge Current [A]	140	140	140	140
Rated Power [kW]	28.6	35.6	42.9	50.1
Weight [kg]	960	1060	1160	1260
Dimension [H*W*D] [mm]	1980*988*1065			
Communication	CAN			
Operating Temperature Range [°C]	-30~50			
Cooling Method	Air Conditioner			
Relative Humidity	5~95% (No Condensing)			
Altitude [m]	2000			
Ingress Protection	IP55			
Mounting	Ground-Mounted			
Control Module	CBC2-HV5			
Weight [kg]	28			
Dimension [H*W*D] [mm]	225*483*610			
Battery Module	CBU2-14.33-HV5			
Rated Energy [kWh]	14.33			
Weight [kg]	115			
Dimension [H*W*D] [mm]	231*523*805			
Applicable Standard	IEC62619-2017, UN38.3, IEC61000-6-2/4, IEC62477			

CB2 SERIE

C & I ENERGY STORAGE BATTERY SYSTEM



CB2-X-HV5



Adopting high-performance 280Ah lithium iron phosphate battery, safe and reliable



Capacity range of 57.3~186.2kWh



Supporting 4 clusters in parallel, flexible in expansion



Supporting remote firmware upgrade

MODEL	CB2-X-HV5
Battery System Energy [kWh]	186.2
Rated Capacity [Ah]	280
Charge/Discharge Current [A]	140
No. of Modules	4~13
Communication	CAN
Operating Temperature Range [°C]	Charging:0~50; Discharging:-20~50
Cooling Method	Smart Fan Cooling
Relative Humidity	5~90(No Condensing)
Altitude [m]	2000
Ingress Protection	IP20
Mounting	Ground-Mounted
Control Module	CBC2-HV5
Voltage Range [V]	160~1000
Weight [kg]	28
Dimension [H*W*D] [mm]	225*483*610
Battery Module	CBU2-14.33-HV5
Rated Energy [kWh]	14.33
Weight [kg]	115
Dimension [H*W*D] [mm]	231*523*805
Applicable Standard	IEC62619-2017, UN38.3, IEC61000-6-2/4, IEC62477