



*Pictures shown are for illustration purposes only.
Actual product may vary from illustration.

Single-Phase Hybrid Inverter

CSI-5kW | 6kW | 8kW

Key Features

- Max. efficiency up to 97.6%
- Backup with UPS-level switching <4ms
- 10s of 200% overload capability
- Support storing energy from diesel generator
- Compatible with lead-acid and LFP batteries

High Reliability

- SPD Type II for DC and AC
- Residual current detection and protection
- IP66 protection level, strong environmental adaptability
- Support AFCI function(optional)

TECHNICAL DATA

Model Name	CSEH-5K-S2201AL-E		CSEH-6K-S2201AL-E	CSEH-8K-S2201AL-E
Battery Data				
Battery Type	Lead-acid or Lithium-ion			
Battery Voltage Range	40-60 V			
Nominal Battery Voltage	48 V			
Max. Charging Current	120 A	135 A	190 A	
Max. Discharging Current	120 A	135 A	190 A	
Charging Strategy for Li-ion Battery	Self-adaption to BMS			
Number of Battery Input	1			
Communication	CAN / RS485			
PV String Input Data				
Max. DC Input Power	8000 Wp	9600 Wp	12800 Wp	
Max. DC Input Voltage	550 V			
Start-up Voltage	110 V			
MPPT Voltage Range	110-450 V			
Rated DC Input Voltage	360 V			
Max. Operating PV Input Current	20 A / 20 A	20 A / 20 A	36 A / 36 A	
Max. Input Short-Circuit Current	30 A / 30 A	30 A / 30 A	50 A / 50 A	
No. of MPP Tracker	2	2	2	
No. of Strings per MPP Tracker	1/1	1/1	2/2	
Output AC (Grid)				
Rated Output Power	5000 W	6000 W	8000 W	
Max. Apparent Output Power	5500 VA	6600 VA	8800 VA	
Rated AC Output Current	22.7 A / 21.7 A	27.3 A / 26.1 A	36.4 A / 34.8 A	
Max. AC Output Current	25 A / 23.9 A	30 A / 28.7 A	40 A / 38.3 A	
Rated Output Voltage	220 V / 230 V			
Grid Connection Type	L+N+PE			
Rated Output Frequency	50 Hz/60 Hz			
Power Factor	>0.99,0.8 leading to 0.8 lagging			
THDi	<3%			
DC Injection Current	<0.5% In			
Output AC (Back-up)				
Rated Output Power	5 kW	6 kW	8 kW	
Max. Apparent Output Power	2 times of rated power, 10 s			
Back-up Switch Time	<4 ms			
Rated Output Voltage	220 V / 230 V			
Rated Frequency	50 Hz / 60 Hz			
Rated Output Current	22.7 A / 21.7 A	27.3 A / 26.1 A	36.4 A / 34.8 A	
Max. Continuous Output Current	30 A	30 A	40 A	
Max. Continuous AC Passthrough Current	30 A	30 A	40 A	
THDv (@Linear Load)	<3%			
Input AC (Grid)				
Input Voltage Range	187-253 V			
Max. Input Current	30 A	30 A	40 A	
Frequency Range	45-55 Hz / 55-65 Hz			
Input Generator				
Max. Input Power	5000 W	6000 W	8000 W	
Max. Input Current	22.7 A	27.3 A	36.4 A	
Rated Input Voltage	220 V / 230 V			
Rated Input Frequency	50 Hz / 60 Hz			
Efficiency				
Max. Efficiency	97.60%			
EU Efficiency	96.50%			
Protection				
Integrated	DC Switch, PV Insulation Resistance Detection, Residual Current Monitoring , PV Reverse Polarity Protection, Battery Reverse Polarity Protection , Anti-islanding Protection, AC Overcurrent Protection, AC Short Circuit Protection, AC Overvoltage Protection, Thermal Protection , Overvoltage Load Drop Protection, Earth Fault Detection, Ground Fault Current Monitoring , AFCI(Optional)			
Surge Protection Level	TYPE II(DC), TYPE II(AC)			
General Data				
Dimension (WxHxD)	374*554*222 mm			
Weight	19.5 kg	19.5 kg	21 kg	
Installation Method	Wall-mounted			
Operating Temperature Range	-40 to +60 ℃ (>45 ℃ derating)			
Operating Ambient Humidity	0-100%(non-condensating)			
Operating Altitude	3000 m (>2000m derating)			
Ingress Protection	IP 66			
Over Voltage Category	OVC II(DC), OVC III(AC)			
Type of Cooling	Natural cooling	Intelligent Fan Cooling	Intelligent Fan Cooling	
Topology	Non-isolated			
DC connection	D4 (PV) / Terminal Block(Battery)			
AC connection	Terminal Block			
Display	LCD+APP			
Communication	CAN / RS485 / WIFI			
Compliance	IEC 62109-1/2; IEC 61000-6-1/2/3/4; IEC 61727; IEC62116; IEC 61683			