



*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 C (>45 C 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		