Consistent Energy Storage Concept
CESC

Saturn Single Phase Hybrid Inverter



PRODUCT MODEL

- Saturn 8K LVS
- Saturn 10K LVS
- Saturn 12K LVS

- Advanced MPPT with up to 99.9% efficiency Up to 22A*2 PV input current
- Outputs high-quality pure sine wave AC power With IP65 protection degree
- With software and hardware security protection, Multiple safety approvals
- Industrial design with a modern aesthetic look, Easy to install and simple to use
- Up to 200A charging current, Supports Li-ion battery BMS communication
- Exclusive Li-ion battery BMS dual activation, Time-slot function to save cost with peak-valley

Models	Saturn 8K LVS	Saturn 10K LVS	Saturn 12K LVS	Can be set
INVERTER OUTPUT				
Rated Output Power [W]	8800	10000	12000	
Max. Peak Power [VA]	17600	20000	24000	
Rated Output Voltage	230 Vac single-phase / three-phase (parallel)			√
Load Capacity of Motors	5HP	6HP		
Output Frequency [HZ]	50 / 60			
Number of Parallel	1 ~ 6 units			
AC OUTPUT (GRID)				
Rated Output Power [W]	8800	10000	12000	
Max. Apparent Power [VA]	8800	10000	12000	
Max. Output Current [A]	40	43.5	54.5	
Rated Output Voltage [Vac]	230			
THDI	< 3%			
Power Factor	0.8 leading to 0.8 lagging			
Frequency [Hz]	50 / 60			
BATTERY				
Battery Type	Lead-acid / Li-ion / User-defined			√
Rated Battery Voltage [V]	48			
Battery Voltage Range [Vdc]	40 ~ 60			
Max. Generator Charging Current [A]	60			
Max. Grid Charging Current [A]	120			
Max. PV Charging Current [A]	200			√
Max. Hybrid Charging Current [A]	200			√
PV INPUT				
Num. of MPPT Trackers	2			
Max. PV Array Power [W]	5500+5500		6600+6600	
Max. Input Current [A]	22 + 22			
Max. Voltage of Open Circuit [Vdc]	500 + 500			
MPPT Voltage Range [Vdc]	125 ~ 425			
MAINS / GENERATOR INPUT				
Input Voltage Range [Vdc]	90 ~ 280			√
Frequency Range [Hz]	50 / 60			
Bypass Overload Current [A]	63			
EFFICIENCY				
MPPT Tracking Efficiency	99.9%			
Max. Efficiency	97.5%			
European Efficiency	97.0%			
GENERAL				
Dimension (W*D*H) [mm]	440*240*670			
Weight [kg]	37			
Protection Degree	IP65			
Operating Temperature Range [°C]	-25 ~ 60°C, >45°C derated			
Humidity Range	0% ~ 100%			
Cooling Method	Forced air cooling			
COMMUNICATION				
Embedded Interfaces	RS485 / CAN / USB / Dry contact			√
External Module (optional)	Wi-Fi / GPRS			√
CERTIFICATION				
Safety	IEC62109-1, IEC62109-2			
EMC	EN61000-6-1, EN61000-6-3, FCC15 classB			
RoHS	Yes			