Consistent Energy Storage Concept
CESC

Saturn Three Phase Hybrid Inverter



PRODUCT MODEL

- Saturn 8K LVT
- Saturn 10K LVT
- Saturn 12K LVT

- 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 260A 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 LVT	Saturn 10K LVT	Saturn 12K LVT	Can be set
INVERTER OUTPUT				
Rated Output Power [W]	8000	10000	12000	
Max. Peak Power [VA]	16000	20000	24000	
Rated Output Voltage		230/400Vac, three phase		√
Load Capacity of Motors	5HP	6HP		
Output Frequency [HZ]		50 / 60		
Number of Parallel		1 ~ 6 units		
AC OUTPUT (ON-GRID)				
Rated Output Power [W]	8000	10000	12000	
Max. Apparent Power [VA]	8000	10000	12000	
Rated AC output phase current [Aac]	11.6	14.5	17.4	
Rated. Output Voltage [Vac]		230/400		
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]	100	120		
Max. Grid Charging Current [A]	100	120		
Max. Hybrid Charging Current [A]	180	220	260	√
PV INPUT				
Num. of MPPT Trackers		2		
Max. PV Array Power [W]	6000 + 6000	7500 + 7500	9000 + 9000	
Max. Input Current [A]		22 + 22		
Max. PV Isc [A]		37 + 37		
Max. Voltage of Open Circuit [Vdc]		800 + 800		
MPPT Voltage Range [Vdc]		200 ~ 650		
MAINS / GENERATOR INPUT				
Input Voltage Range [Vdc]		Phase voltage 170~280Vac line voltage 305~485Vac		√
Frequency Range [Hz]		50 / 60		
Bypass Overload Current [A]	23.2	29	35	
EFFICIENCY				
MPPT Tracking Efficiency		99.9%		
Max. Efficiency		97.5%		
European Efficiency	97.2%	97.5%		
GENERAL				
Dimension (W*D*H) [mm]		440*260*700		
Weight [kg]		39.2		
Protection Degree		IP65		
Operating Temperature Range [°C]		-25~60°C (>45°C derating)		
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		