Saturn Single Phase Hybrid Inverter



PRODUCT MODEL

- Saturn 4K LVS
- Saturn 4.6K LVS
- Saturn 5K LVS
- Saturn 5.5K LVS
- Saturn 6K LVS

- Advanced MPPT with up to 99.9% efficiency, Up to 16A+16A PV input current
- Outputs high-quality pure sine wave AC power With IP65 protection degree
- Comprehensive security from hardware to software Multiple safety approvals
- Industrial design with a modern aesthetic look, Easy to install and simple to use
- Up to 100A 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 4K LVS	Saturn 4.6K LVS	Saturn 5K LVS Saturn5.5K LVS	Saturn 6K LVS	Can be set
OFF-GRID OUTPUT					
Rated Output Power [W]	4000	4600	5500	6000	
Max. Peak Power [VA]	8000	9200	11000	12000	
Rated Output Voltage	230Vac, single phase				√
Load Capacity of Motors	3HP	4HP	4HP	4HP	
Output Frequency Range [HZ]	50 ± 0.3 / 60± 0.3				√
Switching Time	10ms（typical value）				
ON-GRID OUTPUT					
Rated Output Power [W]	4000	4600	5500	6000	
Max. Apparent Power [VA]	8000	9200	11000	12000	
Rated. Output Current [A]	17.4	20	24	26	
Max. Output Current [A]	19.1	22	26.4	28.6	
THDI	< 3%				
Power Factor	0.8 leading to 0.8 lagging				
Rated Voltage	230Vac, single phase				
Frequency [Hz]	50 / 60				
BATTERY					
Battery Type	Lead-acid / Li-ion / User-defined				√
Rated Battery Voltage	48V (minimum start-up voltage 44V)				
Battery Voltage Range [Vdc]	40 ~ 60				√
Max. PV Charging Current [A]	100				√
Max. Utility Charging Current [A]	60				√
Max. Generator Charging Current [A]	60				√
PV INPUT					
Num. of MPPT	2				
Max. Input Power [W]	3000+3000	3500+3500	4000+4000	4500+4500	
Max. Input Current [A]	16+16				
Max. Short-circuit Current [A]	27+27				
Max. Open-circuit Voltage [Vdc]	500+500				
MPPT Operating Voltage Range [Vdc]	120 ~ 450				
UTILITY / GENERATOR INPUT					
Input Voltage Range [Vdc]	90 ~ 280				√
Input Frequency Range [Hz]	50 / 60				
Bypass Overload Current [A]	40				
EFFICIENCY					
MPPT Tracking Efficiency	99.9%				
Max. Efficiency	97.5%				
GENERAL					
Num. of Parallel	1 ~ 6 units				
Dimension (W*D*H) [mm]	345*182*556				
Weight [kg]	20				
Protection Degree	IP65				
Operating Temperature Range [°C]	-25 ~ 60°C (>45°C derating)				
Humidity Range	0% ~ 100%				
Noise	< 60dB				
Cooling Method	heatsink & intelligent air cooling				
Warranty	5 years				
COMMUNICATION					
Internal Interface	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				