Saturn Single Phase Hybrid Inverter

PRODUCT MODEL

- Saturn 3K LVS Pro
- Saturn 3.6K LVS Pro
- Saturn 4K LVS Pro
- Saturn 4.6K LVS Pro
- Saturn 5K LVS Pro
- Saturn 6K LVS Pro
- Saturn 7.5K LVS Pro
- Saturn 8K LVS Pro



- IP66 protection degree.
- Up to 20A maximum PV input current.
- Support diesel generators and charging piles.
- Fast and easy data checking and commissioning.
- Switch to off-grid mode within 10ms.
- Powering inductive & capacitive backup load 2 times rated current.
- Up to 160A Fast charging/discharging.
- Max. 3pcs parallel for off-grid operation.

Models	Saturn 3K LVS Pro	Saturn 3.6K LVS Pro	Saturn 4K LVS Pro	Saturn 4.6K LVS Pro	Saturn 5K LVS Pro	Saturn 6K LVS Pro	Saturn 7.5K LVS Pro	Saturn 8K LVS Pro
PV Input								
Max. input power (W)	6,000	7,200	8,000	9,200	10,000	12,000	12,000	12,000
Start-up Voltage (V)	58	58	58	58	58	58	58	58
Max. DC Input Voltage (V)	600	600	600	600	600	600	600	600
Rated DC Input Voltage (V)	360	360	360	360	360	360	360	360
MPPT Voltage Range (V)	80-550	80-550	80-550	80-550	80-550	80-550	80-550	80-550
No. of MPP Trackers	1	1	2	2	2	2	2	2
No. of DC Inputs per MPPT	1	1	1/1	1/1	1/1	1/1	1/1	1/1
Max. Input Current (A)	20	20	20/20	20/20	20/20	20/20	20/20	20/20
Max. Short-circuit Current (A)	25	25	25/25	25/25	25/25	25/25	25/25	25/25
Battery								
Battery Type	Lithium battery (with BMS)/Lead Acid							
Battery Communication Mode	CAN							
Battery Voltage Range (V)	40-60	40-60	40-60	40-60	40-60	40-60	40-60	40-60
Max. Charge/Discharge Current (A)	80/80	80/80	100/100	100/100	120/120	120/120	160/160	160/160
Output (Grid)								
Rated Output Power (W)**	3,000	3,680	4,000	4,600	5,000	6,000	7,500	8,000
Max. Output Power (W)	3,300	3,680	4,400	5,060	5,500	6,600	8,250	8,800
AC Output Rated Apparent Power (VA)	3,000	3,680	4,000	4,600	5,000	6,000	7,500	8,000
Max. Apparent Power (VA)	3,300	3,680	4,400	5,060	5,500	6,600	8,250	8,800
Rated Output Voltage (V)**	L/N/PE，220/230							
Rated AC Frequency (Hz)	50/60							
AC Output Rated Current (A)	13	16	17.4	20	21.7	26.1	32.6	34.8
Max. Output Current (A)	15	16	20	23	25	30	37.5	40
The measured Inrush current (A)	8.8A@28μs							
Max. Output Fault Current (A)	50	50	50	50	80	80	80	80
Max. Output Overcurrent Protection (A)	50	50	50	50	80	80	80	80
Power Factor	0.8 leading …0.8 lagging							
Max. Total Harmonic Distortion	<3% @Rated Output Power							
DCI	<0.5%In							
Output (Back-up)								
Rated Output Power (W)	3,000	3,680	4,000	4,600	5,000	6,000	7,500	8,000
Max. Output Power (W)	3,300	3,680	4,400	5,060	5,500	6,600	8,250	8,800
Back-up Output Rated Apparent Power (VA)	3,000	3,680	4,000	4,600	5,000	6,000	7,500	8,000
Max. Apparent Power (VA)	3,300	3,680	4,400	5,060	5,500	6,600	8,250	8,800
Back-up Output Rated Current (A)	13	16	17.4	20	21.7	26.1	32.6	34.8
Max. Output Current (A)	15	16	20	23	25	30	37.5	40
UPS Switching Time	<10ms							
Rated Output Voltage (V)	L/N/PE，220/230							
Rated AC Frequency (Hz)	50/60							
Peak Output Apparent Power (VA)	6,000①,10s	7,200①,10s	8,000①,10s	10,000①,10s	10,000①,10s	12,000①,10s	12,000①,10s	12,000①,10s
Load Capacity of Motors	/	/	/	/	4HP	4HP	4HP	4HP
Efficiency								
Max. Efficiency	97.6%	97.6%	97.6%	97.6%	97.6%	97.6%	97.6%	97.6%
European Efficiency	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%
MPPT Efficiency	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%
Protection								
DC Reverse Polarity Protection	Integrated							
Insulation Resistance Protection	Integrated							
DC Switch	Integrated							
AFCI	Optional							
Surge Protection	Integrated							
Over-temperature Protection	Integrated							
Residual Current Protection	Integrated							
Islanding Protection	Integrated							
AC Over-voltage Protection	Integrated							
Overload Protection	Integrated							
AC Short-circuit Protection	Integrated							
General Data								
Over Voltage Category	DC：Ⅱ; AC：Ⅱ							
Dimensions (mm)	488*374*205							
Weight (KG)	20 / 21							
Protection Degree	IP66							
Self-consumption at Night (W)	< 15							
Topology	Transformerless							
Operating Temperature Range (°C)	-25~60							
Relative Humidity (%)	0~100							
Operating Altitude (m)	3000							
Cooling	Natural Convection / Fan							
Noise Level (dB)	<40 / <50							
Display	LCD/ OLED							
Communication	WiFi/Bluetooth							

①The output power will exceed the rated value only when the power in the PV array is sufficient, and the duration of the overload is relating to the overload power.
*For G98 setting the Maximum output Power and Rated Power and Max Apparent Power in (W and VA) is equal to and not more than (3600 W) or 15.6A.
**Due to differences in voltage values in various countries, minor variations may occur. The final interpretation rights belong to CESC.