

On-Grid Solar Inverter

Profitable

- Highest efficiency recorded in the industry (max. 98.65%)
- High power density with a small footprint
- Low failure rate and quick fix to reduce power generation loss

Safe

- Fuseless design to avoid potential fire hazard caused by DC side faults
- Fanless design to avoid frequent fan failures leading to shutdown
- LVRT function, meeting global grid access requirements

Reliable

- Natural cooling; Protection rating IP 65
- Built-in AC and DC lightning protection module, all-round lightning protection
- Industrial-grade high quality components, ensuring a 25-year design life

Smart Connected

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Smart Connected

- Inverter with Bluetooth communication connected to smart phone for an easy human-machine interaction and easy on-site installation and settings
- Remote maintenance and quick troubleshooting to ensure power generation

Compact & Contemporary Design

- Advanced industrial design concept, integrated die casting molding
- Aluminum alloy die casting enclosure, permanently anti-rust



MODEL	SON5000I	SON6000I	SON8000I	SON10000I	SON13000I	SON15000I
INPUT (DC)						
Max. input power	6.5 kW					
Max. input voltage	1000 V					
Start-up voltage	180 V				250 V	
MPPT voltage range	120 - 950 V			16.9 kW		
MPPT voltage range at full load	185 - 850 V	220 - 850 V	10.4 kW	13 kW	16.9 kW	20.8 kW
Max. input current	14 A / 14 A				16.9 kW	
Max. short circuit current	20 A / 20 A				16.9 kW	
Number of MPPTs	2					
Number of DC inputs	A:1 / B:1				16.9 kW	A:2 / B:1
OUTPUT (AC)						
Rated output power	5 kVA	6 kW	8 kW	10 kW	13 kW	16 kW
Max. active power	5 kVA	6 kW	8 kW	10 kW	13 kW	16 kW
Max. apparent power	5 kVA	6 kW	8 kW	10 kW	13 kW	16 kW
Max. output current	7.3 A	8.7 A	11.6 A	14.5 A	18.9 A	23.2 A
Rated grid voltage	230 / 400 V, 3 W + N + PE					
Grid voltage range	176 – 276 V / 304 – 480 V *					
Rated grid frequency	50 / 60 Hz					
Grid frequency range	45 - 55 / 55 - 65 Hz *					
THD	< 3% (rated power)					
Output current DC component	< 0.5% In					
Power factor	> 0.99 (rated power)					
Power factor adjustable	0.8 leading ~ 0.8 lagging					
EFFICIENCY						
Max. efficiency	98.65%	7.8 kW	10.4 kW	13 kW	16.9 kW	20.8 kW
European efficiency	98.2%	7.8 kW	10.4 kW	13 kW	16.9 kW	20.8 kW
OTHERS						
Protections	Anti-islanding protection, output overcurrent/overvoltage protection, leakage current protection, DC reverse polarity protection, DC/AC surge protection, ground insulation resistance detection, DC switch (standard), PID prevention and restoration (optional)					
Communications	RS485, Wi-Fi / Ethernet (optional), GPRS (optional)					
Display	LED, Bluetooth (optional)					
Self-consumption at night	< 1 W					
IP rating	IP 65					
Cooling	Natural cooling					
Isolation	Transformerless					
Standards	IEC/EN 62109-1, IEC/EN 62109-2, VDE AR-N-4105, AS/NZS 4777.2, CEI 0-21, EN 50438, IEC 61683, IEC 61727, IEC 62116, EN 61000-6-1, EN 61000-6-2, EN 61000-6-3, EN 61000-6-4					
Operating temperature	-25°C ~ +60°C (> 45°C downgrading)					
Relative humidity	0 ~ 100% (non-condensing)					
Altitude	2000 m					
Dimensions (W × D × H) (mm)	515 × 166.5 × 435					
Packaged dimensions (W × D × H) (mm)	605 × 536 × 245					
Net weight (kg)	25					
Gross weight (kg)	28					