

Off-grid | Single Phase | Low Voltage

Hybrid Inverter

3/4/5/6/8/10/12 kW



Product Features



Wide PV Input

- 150%–220% PV Input Power
- Supports 2–4 Independent MPPT Tracks
- Max PV Input Current per Track: 18A



Robust Grid Input

- 184%–440% Grid Input Power
- 60–100A Grid Input Current
- Supports simultaneous load power supply and battery charging



High Efficiency

- Silicon Carbide (SiC) Technology
- Max. Conversion Efficiency up to 97.5%



Wide Grid Voltage

- 176–264V Supported Grid Voltage
- Suitable for areas with fluctuating mains voltage
- Stable performance under weak-grid conditions



Strong Overload

- Supports 125%–150% continuous overload
- Easily drives inductive loads
- Smooth startup without tripping or power interruption



Parallel Operation

- Up to 3-unit parallel operation (3–6 kW models)
- Flexible power expansion for high-power loads
- Stable parallel connection & great expandability



Battery Compatibility

- Compatible with lead-acid & lithium batteries
- Intelligent charge-discharge strategy
- Precise protection extends battery life



Seamless switching

- 0 ms off-grid to grid-tied switch*
- 4 ms grid-tied to off-grid switch*
- Smooth startup; no tripping no power outage



Intelligent Silent Cooling

- Intelligent temperature-controlled fan low-noise operation
- Fan off at ≤50% rated output power

Model Name	Isuna 3000SO	Isuna 4000SO	Isuna 5000SO	Isuna 6000SO	Isuna 8000SO	Isuna 10000SO	Isuna 12000SO
	Off-grid Output						
Rated Output Power	3kW	4kW	5kW	6kW	8kW	10kW	12kW
Max. Output Power	3.3kVA	4.4kVA	5.5kVA	6.6kVA	8.8kVA	11kVA	13.2kVA
Peak Power & Duration	4.5kVA-10s	6kVA-10s	8kVA-10s	8kVA-10s	12kVA-10s	15kVA-10s	15kVA-10s
Rated Output Current	13.6A	18.2A	22.7A	27.2A	36.4A	45.4A	54.4A
Rated Frequency	50/60Hz						
Rated Voltage & Range	220Vac±10%						
	Grid Input Parameter						
Max. Output Power	8kW	8kW	8kW	8kW	16kW	16kW	16kW
Max. Grid-In Current	60A	60A	60A	60A	100A	100A	100A
Grid Voltage Range	176-264V						
Grid Frequency	50/60Hz						
THDi	<3%						
	PV Input						
Rec. Max. Install Pwr.	8250Wp	10000Wp	11250Wp	11250Wp	17500Wp	22500Wp	22500Wp
Max. Intput Power	6600Wp	8000Wp	9000Wp	9000Wp	14000Wp	18000Wp	18000Wp
Number of MPPT	2				4		
Max. Intput Current	18A/18A				18A/18A/18A/18A		
Max. Short-ckt Current	22A/22A				22A/22A/22A/22A		
Startup Voltage	120V						
Max. Intput Voltage	500V						
MPPT Voltage Range	100-500V						
Rated Voltage	360V						
	Battery Parameter						
Battery Type	Lithium-ion/Lead-acid						
Rated Voltage	48V						
Battery Voltage Range	42-58V						
Max. Charging Voltage	58V						
Max. Disch. Current	60A	80A	100A	120A	200A		
Max. Charging Current	60A	80A	100A	100A	200A		
	Efficiency						
Max. Efficiency	97.4%		97.5%		97.4%	97.5%	
European Efficiency	97.2%		97.3%		97.2%	97.3%	
Max. Batt. Chg-Disch. Efficiency	94%						
	General Data						
Dimensions(W*H*D)	360*470*114mm				400*620*210mm		
Weight	14kg				29kg		
Max. Parallel Quantity	6				1		
Noise Level	<45dB(A)						
Operating Temperature	-25℃~60℃(>55℃ Derating)						
Cooling Type	Fan Cooling						
IP Rating	IP20						
Comm. Interface	CAN+RS485						
HMI Mode	LCD/LED/APP/WIFI/Bluetooth						
Protection	Reverse-input protection; Overcurrent / Overvoltage protection; AC short-circuit protection; PV ground-fault monitoring; Overtemperature protection						
Warranty	5 years						
	Certification						
CE-EMC	EN IEC 61000-6-1: 2019, EN 61000-6-2, EN IEC 61000-6-3: 2021, EN IEC 61000-3-11: 2019, EN IEC 61000-3-12: 2011 IEC 61000-6-1, IEC61000-6-2, IEC61000-6-3, EN IEC 61000-3-2:2019+A1:2021, EN 61000-3-3:2013+A2:2021						
CE-LVD	EN 62109-2:2011, EN 62109-1:2010						

*Technical data are typical laboratory values and may vary in practical application