

On/Off-grid | Single Phase | High Voltage

Hybrid Inverter

5/6/8/10/12 kW



Product Features



Wide PV Input

- 166%-400% PV Input Power
- 20A PV Input Current
- 3 MPPT Tracks



Robust Grid Input

- 150%-360% Grid Input Power
- Max. Grid Input Power 18kW
- Supports simultaneous load power supply and battery charging



High Efficiency

- Silicon Carbide (SiC) Technology
- Max. Conversion Efficiency up to 98.2%
- Lower losses, higher power generation for improved energy-use returns



Executive Gen Smart Load Port

- Auto start-stop for generator
- Max. generator input current 82A



Strong Overload

- Supports 166%-400% continuous overload
- Smooth startup, no tripping & no power interruption



Parallel Operation

- Up to 6-unit parallel operation (off-grid mode)
- Flexible power expansion for high-power loads
- Supports AFCI and PID functions (optional)



Battery Compatibility

- Compatible with lead-acid, lithium and sodium-ion batteries
- 2 independent battery ports
- Mixed new/old battery support



Long Official Warranty

- 5-year standard warranty included
- IP65 protection rating
- Stable and durable



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

Model Name	Isuna D5K-SH	Isuna D6K-SH	Isuna D8K-SH	Isuna D10K-SH	Isuna D12K-SH
	Off-grid Output				
Rated Output Power	5kW	6kW	8kW	10kW	12kW
Max. Output Power	5.5kVA	6.6kVA	8.8kVA	11kVA	13.2kVA
Max. Output Current	25A	30A	40A	50A	60A
Peak Power & Duration	20kVA-10s*				
Rated Voltage	L/N/PE, 220V/230V/240V				
Switching Time	<4ms*				
	On-grid Parameter				
Rated Output Power	5kW	6kW	8kW	10kW	12kW
Max. Output Power	5.5kVA	6.6kVA	8.8kVA	11kVA	13.2kVA
Max. Output Current	25A	30A	40A	50A	60A
Max. Grid Input Power	18kVA				
Thdi	<3%				
Grid Frequency	50/60±5Hz				
	PV Input				
Rec. Max. Install Pwr.	24kWp				
Max. Input Power	20kWp				
Max. Input Voltage	1000V				
Number of MPPT	3				
No. of Strings per MPPT	1/1/1				
MPPT Voltage Range	130-960V				
Startup Voltage	140V				
Max. Input Current	20A/20A/20A				
Short-ckt Current	24A/24A/24A				
	Battery Parameter				
Battery Type	Lithium-ion/Lead-acid/Sodium-ion				
No. of Battery Inputs	2				
Battery Voltage Range	125-800V				
Max. Chg-Disch. Curr.	25A*2				
	Generator Parameter				
Max. Input Current	80A				
Rated Output Voltage	L/N/PE, 220V/230V/240V				
Voltage Range	185~276V(P2N)				
	Efficiency				
Max. Efficiency	98.2%				
European Efficiency	97.7%				
Max. Batt. Chg-Disch. Efficiency	98%				
	General Data				
Dimensions(W*H*D)	400*575*165mm				
Weight	26kg				
Noise Level	<45dB(A)				
Operating Temperature	-25°C ~ +60°C (>45°C Derating)				
Operating Altitude	4000m(>3000m Derating)				
Cooling Type	Intelligent Air Cooling				
IP Rating	IP65				
Battery Topology	Non-Isolated				
Comm. Interface	RS485/CAN/DRED/DO/Parallel port				
HMI Mode	H5/LED/APP/WIFI/4G/Bluetooth				
Protection	DC Switch; OC / OV Protection; AC Short-ckt Protection; Anti-islanding Protection; Resid. Current Detection; Insul. Resistance Detection; Surge Protection: DC Type II / AC Type III; Lightning Protection; Reverse-insertion Protection (PV & Batt.); Integrated AFCI (Opt.), PID Recovery Circuit (Opt.)				
	Certification				
CE-LVD	IEC62109-1&2, IEC62040-1				
CE-EMC	EN61000-6-1, EN61000-6-2, EN61000-6-3, EN61000-6-4, EN 61000-4-16, EN 61000-4-18, EN 61000-4-29				
Grid	EN 50549-1, CEI 0-21, AS/NZS4777.2, NRS 097-2-1				

* Overload output requires adequate PV and battery energy

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