

On/off-Grid | Three Phase | Low Voltage

Hybrid Inverter 20/22/25/29.9/30 kW



Product Features

Wide PV Input

- 200%PV input power
- Supports 4 MPPT channels
- 20/40A PV input current

Strong Grid Input

- 75.8-90.9A Grid input current
- Supports simultaneous load power supply & battery charging

High Efficiency

- MPPT Efficiency 99.9%
- SiC Technology

Dedicated Genset Port

- Auto start-stop for generator
- 75.8-90.9A Max generator input current

Strong Overload

- 110% continuous overload
- Easily drives inductive loads
- Smooth startup, no tripping or power interruption

Parallel Operation

- Supports up to 6 units in parallel (Off-grid Mode)
- Flexible power expansion for high-power loads
- Stable parallel system, strong scalability

Battery Compatibility

- Compatible with lead-acid, lithium and sodium-ion batteries
- 2 independent battery ports compatible with new & used batteries
- 230A Battery Current

Long Official Warranty

- Standard 5-year warranty
- Industrial-grade design & quality control
- Lower maintenance cost, higher reliability

Intelligent Silent Cooling

- Intelligent temperature-controlled fan for quiet operation

SINEXCEL					
Model Name	Isuna W20K-TL-S	Isuna W22K-TL-S	Isuna W25K-TL-S	Isuna W29.9K-TL-S	Isuna W30K-TL-S
	Off-grid Parameter				
Rated Output Power	20kW	22kW	25kW	29.9kW	30kW
Max. Apparent Power	22kVA	24.2kVA	27.5kVA	32.9kVA	33kVA
Max. Output Current	33.3A/31.9A	36.7A/35.1A	41.7A/39.9A	49.8A/47.7A	50A/47.8A
Peak Power & Duration	45kW-10s				
Peak Output Current	68.2A-10s				
Rated Output Voltage	3/N/PE, 220/380Vac; 230/400Vac				
Thdu	<3%				
Switching Time	<20ms				
	On-grid Parameter				
Rated Output Power	20kW	22kW	25kW	29.9kW	30kW
Max. Apparent Power	22kVA	24.2kVA	27.5kVA	32.9kVA	33kVA
Max. Output Current	33.3A/31.9A	36.7A/35.1A	41.7A/39.9A	49.8A/47.7A	50A/47.8A
Max. Grid Intput Power	50kW	52kW	55kW	59.9kW	60kW
Max. Grid Intput Current	75.8A	78.8A	83.3A	90.8A	90.9A
Rated Voltage	3/N/PE, 220/380Vac; 230/400Vac				
Grid Voltage Range	185-276V (P2N)				
THDi	<3%				
	PV Parameter				
Rec. PV Input Power	40kWp	44kWp	50kWp	59.8kWp	60kWp
Max. PV Input Power	32kW	35.2kW	40kW	47.8kW	48kW
Max. Input Voltage	1000V				
Startup Voltage	150V				
MPPT Voltage Range	150-850V				
Full Load MPPT V Range	450-850V				
Rated Voltage	600V				
MPPT Quantity	4				
Max. Number of PV Strings per MPPT Tracker	2/2/1/1				
Max. Input Current	40A/40A/20A/20A				
Short-circuit Current	60A/60A/30A/30A				
	Battery Parameter				
Battery Type	Lithium-ion / Lead-acid / Sodium				
Battery Input Channels	2				
Battery Voltage Range	28-60V				
Rated Chg&Disch Power	10kW/10kW	11kW/11kW	12.5kW/12.5kW	14.95kW/14.95kW	15kW/15kW
Peak Chg/Disch Current Duration	240A+240A-10S				
Max. Chg/Disch Current	230A+230A				
COMM Interface	CAN/RS485				
	Generator Parameter				
Rated Input Power	20kW	22kW	25kW	29.9kW	30kW
Max. Input Power	50kW	52kW	55kW	59.9kW	60kW
Rated Input Current	30.3A/29A	33.3A/31.9A	37.9A/36.2A	45.3A/43.3A	45.5A/43.5A
Max. Input Current	75.8A	78.8A	83.3A	90.8A	90.9A
Rated Voltage	3/N/PE, 220/380Vac; 230/400Vac				
Voltage Range	185-276V (P2N)				
	Efficiency				
MPPT Efficiency	99.9%				
European Efficiency	97.5%				
	General Data				
Dimensions(W*H*D)	515*665*270mm				
Weight	55kg(TBD)				
Topology	Non-isolated				
Operating Temperature	-25℃ ~ +60℃				
Noise	<65db				
Cooling Type	Intelligent Air Cooling				
IP	IP65				
COMM Interface	RS485/WiFi/Bluetooth/LAN/CAN/DRM/Meter				
Protect	Overvoltage/Undervoltage Protection, Overcurrent/Short-circuit Protection,Anti-islanding Protection, Overfrequency/Underfrequency Protection, Earth Leakage Protection, Insulation Detection & Protection, Reverse Polarity Protection, Active Activation,Earth Leakage Protection,Integrated AFCI (Optional)				
	Certification				
CE-EMC	IEC/EN 61000-6-1/-2, IEC/EN 61000-6-3/-4, IEC/EN 61000-3-2/-12, IEC/EN 61000-3-3/-11				
CE-LVD	IEC 62109-1, IEC 62109-2, EN 62477-1				
Grid	VDE-AR-N 4105 0124, EN 50549-1:2019/AC:2019, EN 50549-10:2022, C10/C11				