9 Technical Specifications

Efficiency

Technical Specifications	SUN2000-8K-LC0	SUN2000-10K-LC0	SUN2000-8K-LC0-ZH	SUN2000-10K-LC0-ZH
Maximum efficiency	98.1%	98.1%	98.1%	98.1%
European efficiency	97.5%	97.5%	97.5%	97.5%

Input

Technical Specifications	SUN2000-8K-LC0	SUN2000-10K-LC0	SUN2000-8K-LC0-ZH	SUN2000-10K-LC0-ZH
Recommended maximum input DC power	12,000 W	15,000 W	12,000 W	15,000 W
Maximum input voltage[1]	600 V			
Maximum input current per MPPT	16 A (Subject to the product nameplate)			
Maximum short-circuit current per MPPT	20 A (Subject to the product nameplate)			

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Technical Specifications	SUN2000-8K-LC0	SUN2000-10K-LC0	SUN2000-8K-LC0-ZH	SUN2000-10K-LC0-ZH
Minimum startup voltage	50 V			
MPPT voltage range	40–560 V			
Rated input voltage	360 V			
Maximum number of inputs[2]	3			
Number of MPPT circuits	3			
Maximum battery input voltage	600 V DC			
Battery voltage range	350–600 V DC			
Maximum battery current	25 A			
Battery type	Li-ion			
Note [1]: The maximum input voltage is the maximum DC input voltage that the inverter can withstand. If the input voltage exceeds this value, the inverter may be damaged. Note [2]: Do not connect only one PV string to the inverter.				

On-Grid Output

Technical Specifications	SUN2000-8K-LC0	SUN2000-10K-LC0	SUN2000-8K-LC0-ZH	SUN2000-10K-LC0-ZH
Rated output power	8000 W	10,000 W	8000 W	10,000 W
Maximum apparent power	8800 VA	10,000 VA	8800 VA	10,000 VA

Technical Specifications	SUN2000-8K-LC0	SUN2000-10K-LC0	SUN2000-8K-LC0-ZH	SUN2000-10K-LC0-ZH
Maximum active power (cosϕ = 1)	8800 W	10,000 W	8800 W	10,000 W
Rated output voltage	220 V/230 V/240 V			
Maximum output voltage at long-term operation	Refer to the local power grid standards.			
Rated output current	36.4 A/220 V 34.8 A/230 V 33.3 A/240 V	45.5 A/220 V 43.5 A/230 V 41.7 A/240 V	36.4 A/220 V 34.8 A/230 V 33.3 A/240 V	45.5 A/220 V 43.5 A/230 V 41.7 A/240 V
Maximum output current	40.0 A	45.5 A	40.0 A	45.5 A
Output voltage frequency	50 Hz/60 Hz			
Maximum output fault current	113.12 A	128.55 A	113.12 A	128.55 A
Power factor	0.8 leading ... 0.8 lagging			
Output DC component (DCI)	< 0.25% of the rated output			
Maximum total harmonic distortion (AC THDi)	≤ 3% (rated conditions)			

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Off-Grid Output

Technical Specifications	SUN2000-8K-LC0	SUN2000-10K-LC0	SUN2000-8K-LC0-ZH	SUN2000-10K-LC0-ZH
Rated apparent power	8000VA	10000VA	8000VA	10000VA
Maximum apparent power	110%, 60s			

Protection

Technical Specifications	SUN2000-8K-LC0	SUN2000-10K-LC0	SUN2000-8K-LC0-ZH	SUN2000-10K-LC0-ZH
Overvoltage category	DC II/AC III			
Input DC switch	Supported			
Anti-islanding protection	Supported			
Output overcurrent protection	Supported			
Input reverse connection protection	Supported			
PV string fault detection	Supported			
DC surge protection	Supported			
AC surge protection	Supported			
Insulation resistance detection	Supported			
AFCI	Supported			

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Technical Specifications	SUN2000-8K-LC0	SUN2000-10K-LC0	SUN2000-8K-LC0-ZH	SUN2000-10K-LC0-ZH
Residual current monitoring unit (RCMU)	Supported			

Display and Communication

Technical Specifications	SUN2000-8K-LC0	SUN2000-10K-LC0	SUN2000-8K-LC0-ZH	SUN2000-10K-LC0-ZH
Display	LED indicators			
WLAN-FE Dongle	Optional			
4G Smart Dongle	Optional			
RS485 communication	Supported			
Built-in WLAN	Supported			

General Specifications

Technical Specifications	SUN2000-8K-LC0	SUN2000-10K-LC0	SUN2000-8K-LC0-ZH	SUN2000-10K-LC0-ZH
Dimensions (W x H x D, with hanging kits)	425 mm x 376.5 mm x 150 mm			
Net weight	≤ 15 kg			
Noise	< 29 dB (typical working condition)	< 40 dB (typical working condition)	< 29 dB (typical working condition)	< 40 dB (typical working condition)
Operating temperature	–25°C to +60°C			
Relative humidity	0–100% RH			

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Technical Specifications	SUN2000-8K-LC0	SUN2000-10K-LC0	SUN2000-8K-LC0-ZH	SUN2000-10K-LC0-ZH
Cooling mode	Free cooling	Smart air cooling	Free cooling	Smart air cooling
Maximum operating altitude	4000 m (derated when the altitude is greater than 2000 m)			
Storage temperature	–40°C to +70°C			
IP rating	IP66			
Topology	Transformerless			

Wireless Communication Parameters

Specifications	Inverter Built-in WiFi	WLAN-FE Smart Dongle	4G Smart Dongle
Frequency	2400–2483.5 MHz	SDongleA-05: 2400–2483.5 MHz	SDongleB-06-EU (WiFi): 2400–2483.5 MHz SDongleB-06-EU (4G): • Supports LTE-FDD: B1/B3/B5/B8. • Supports LTE-TDD: B7/B20/B28/B38/B40/B41. • Supports GSM/GPRS/EDGE: 900 MHz/1800 MHz.
Protocol standard	WLAN 802.11b/g/n	SDongleA-05: WLAN 802.11b/g/n	SDongleB-06-EU (WiFi): WLAN 802.11b/g/n SDongleB-06-EU (4G): • Supports LTE FDD (with receive diversity): B1/B3/B5/B8. • Supports LTE-TDD (with receive diversity): B7/B20/B28/B38/B40/B41. • Supports GSM: 900 MHz/1800 MHz. • Supports digital audio.

Specifications	Inverter Built-in WiFi	WLAN-FE Smart Dongle	4G Smart Dongle
Bandwidth	20 MHz/40 MHz (optional)	20 MHz/40 MHz (optional)	LTE features: • Supports a maximum of 3GPP R8 non-CA Cat 4 FDD and TDD. • Supports 1.4 MHz/3 MHz/5 MHz/10 MHz/15 MHz/20 MHz RF bandwidth. • Supports MIMO in the downlink. • LTE-FDD: maximum downlink rate of 150 Mbit/s and maximum uplink rate of 50 Mbit/s • LTE-TDD: maximum downlink rate of 130 Mbit/s and maximum uplink rate of 30 Mbit/s UMTS features: • Supports 3GPP R7 HSDPA+, HSDPA, HSUPA, and WCDMA. • Supports QPSK and 16QAM modulation. • HSDPA+: maximum downlink rate of 21 Mbit/s • HSUPA: maximum uplink rate of 5.76 Mbit/s • WCDMA: maximum downlink rate of 384 kbit/s and maximum uplink rate of 384 kbit/s GSM features: GPRS: • Supports GPRS multislot class 12. • Coding schemes: CS-1, CS-2, CS-3, and CS-4 • Maximum downlink rate: 85.6 kbit/s; maximum uplink rate: 85.6 kbit/s EDGE: • Supports EDGE multislot class 12. • Supports GMSK and 8-PSK modulation and coding schemes. • Downlink coding format: MCS 1–9 • Uplink coding format: MCS 1–9 • Maximum downlink rate: 236.8 kbit/s; maximum uplink rate: 236.8 kbit/s SDongleB-06-EU (WiFi): 20 MHz/40 MHz (optional)

Specifications	Inverter Built-in WiFi	WLAN-FE Smart Dongle	4G Smart Dongle
Maximum transmit power	≤ 20 dBm EIRP	≤ 20 dBm EIRP	• Class 4 (33 dBm±2 dB), EGSM900 frequency band • Class 1 (30 dBm±2 dB), DCS1800 frequency band • Class E2 (27 dBm±3 dB), EGSM900 8-PSK • Class E2 (26 dBm±3 dB), DCS1800 8-PSK • Class 3 (24 dBm+1/–3 dB), WCDMA frequency band • Class 3 (23 dBm±2 dB), LTE-FDD frequency band • Class 3 (23 dBm±2 dB), LTE-TDD frequency band SDongleB-06-EU (WiFi): ≤ 20 dBm EIRP