

# Technical Data

## Efficiency

Technical Specifications	SUN2000-4.95KTL-JPL1
Efficiency (JIS)	97.0%

## Input

Technical Specifications	SUN2000-4.95KTL-JPL1
Maximum input voltage <sup>[a]</sup>	600 V (450 V indoor cabling and 600 V outdoor cabling)
Maximum input current (per MPPT)	16 A
Maximum short-circuit current (per MPPT)	25 A
Operating voltage range	80–600 V
Startup voltage <sup>[b]</sup>	100 V
MPPT voltage range	90–560 V
Rated input voltage	320 V
Number of inputs	4
Number of MPPTs	2
Note [a]: The maximum input voltage includes the PV input voltage and battery input voltage. Note [b]: In the PV-only off-grid scenario, the startup voltage must be at least 200 V. Due to susceptibility to weather and sunlight, the energy yield may be unstable without batteries.	

## Output

Table 10-1 Grid-tied output feature

Technical Specifications	SUN2000-4.95KTL-JPL1
Rated output power	4.95 kW

Technical Specifications	SUN2000-4.95KTL-JPL1
Maximum apparent power	5.21 kVA
Rated output voltage	101 V, 202 V
Adapted power grid frequency	50 Hz/60 Hz
Maximum output current	25.8 A
Power factor	0.8 leading and 0.8 lagging
Maximum total harmonic distortion (rated power)	≤ 3%

**Table 10-2** Self-supporting operation output feature

Technical Specifications	SUN2000-4.95KTL-JPL1
Rated output power (self-supporting 101 V AC) @ linear load	2.45 kVA
Rated output power (self-supporting 202 V AC) @ linear load	4.95 kVA
Rated output voltage	Two-wire 101 V Three-wire 202 V
Rated output current	24.5 A
Output DC component DCV	≤ 300 mV
SUN2000 self-supporting operation without loads	< 80 W
Grid connection recovery time after self-supporting operation	The default value is 300s. The value ranges from 6s to 300s

## Protection

Technical Specifications	SUN2000-4.95KTL-JPL1
Anti-islanding protection	Supported

Technical Specifications	SUN2000-4.95KTL-JPL1
DC reverse polarity protection	Supported
Insulation monitoring protection	Supported
Residual current monitoring	Supported
AC short-circuit protection	Supported
AC overcurrent protection	Supported
Overtemperature protection	Supported
DC surge protection	Supported
AC surge protection	Supported
AC overvoltage protection	Supported
Arc fault protection	Protection is triggered when the SUN2000 detects that the power component is abnormal or the output voltage (current) is abnormal

## Communications

Technical Specifications	SUN2000-4.95KTL-JPL1
Display	LED indicators, app
RS485	Supported

## Common Parameters

Technical Specifications	SUN2000-4.95KTL-JPL1
Topology	Transformerless
IP rating	IP65
Cooling mode	Natural cooling
Dimensions (W x H x D)	365 mm x 649 mm x 159 mm
Weight	< 20 kg

Technical Specifications	SUN2000-4.95KTL-JPL1
Operating temperature	−25°C to +60°C
Operating humidity	0%–100% RH
Storage humidity	5%–95% RH
Storage temperature	−40°C to +70°C
Operating altitude	0–4000 m (derated when the altitude is higher than 2000 m)