

SUN2000

45KTL-US-HV-D0

For North America regional



HUAWEI Inverter, Designed For TrinaPro



Smart

- 4 MPPTs for versatile adaptations to different layouts
- 8 strings intelligent monitoring and fast trouble-shooting
- Power Line Communication (PLC) supported
- Smart I-V Curve Diagnosis supported



Efficient

- Max. efficiency 98.7%
- CEC efficiency 98.5%



Safe

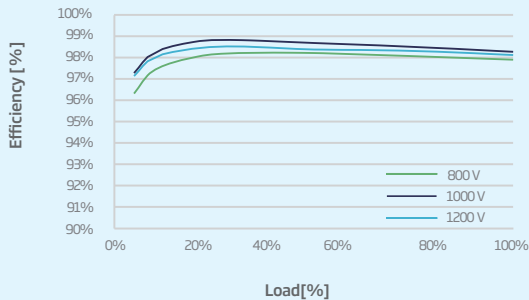
- DC AFCI compliant to UL 1699B Type I
- Type II surge arresters for both DC and AC
- Residual Current Monitoring Unit (RCMU) integrated inside



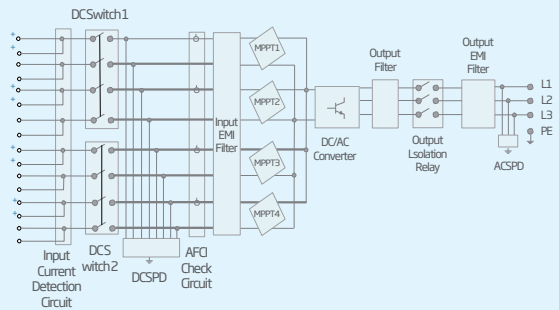
Reliable

- Natural cooling technology
- Fuse free design
- Protection rating of NEMA Type 4X

Efficiency Curve



Circuit Diagram



SUN2000-45KTL-US-HV-D0

SUN2000-45KTL-US-HV-DO

Technical Specifications

SUN2000-45KTL-US-HV-DO

Efficiency

Max.Efficiency	98.7%
CEC.Efficiency	98.5%

Input

Max. Input Voltage	1,500V
Max. Current per MPPT	22A
Max. Short Circuit Current per MPPT	30A
Start Voltage	650V
Full Power MPPT Voltage Range	880V~1,200V
MPPT Operating Voltage Range	600V~1,450V
Max. Number of Inputs	8
Number of MPP Trackers	4

Output

Rated AC Active Power	45,000W
Max. AC Apparent Power	50,000VA
Max. AC Active Power (cos φ=1)	50,000 W
Rated Output Voltage	600 Vac, 3W+PE
Rated AC Grid Frequency	60Hz
Max. Output Current	48A
Adjustable Power Factor	0.8 LG... 0.8 LD
Max. Total Harmonic Distortion	< 3%

Protection

DC Arc Fault Circuit Interrupter	Yes, compliant to UL 1699B Type I
Input-side Disconnection Device	Yes
Anti-islanding Protection	Yes
DC Reverse-polarity Protection	Yes
AC Overcurrent Protection	Yes
PV-array String Fault Monitoring	Yes
DC Surge Arrester	Typell
AC Surge Arrester	Typell
DC Insulation Detection	Yes
Residual Current Detection	Yes

Communication

Display	LED Indicators
RS485	Yes
USB / Bluetooth + APP	Yes
Power Line Carrier Communication (PLC)	Yes

General

Dimensions (W×H×D, with mounting plate)	36.6inch×23.6 inch × 10.6 inch (930 mm × 600 mm × 270 mm)
Weight	141 lb. (64 kg) with mounting plate
Operation Temperature Range	-13°F ~ 140°F (-25°C ~ 60°C)
Cooling	Natural Convection
Relative Humidity	0 ~ 100 %
DC Connector	Amphenol Helios H4
AC Connector	Waterproof PG Terminal + OT Connector
Protection Rating	NEMA Type 4X
Topology	Transformerless

Standards Compliance

Safety/EMC	UL 1741, UL 1699B, CSA C22.2 #107.1-01, FCC Part 15
Grid Code	IEEE 1547, IEEE 1547a