



One-Fits-All Optimizer
 Easier Business



<1.5 min Pairing with Inverter



<5s Module Auto-Mapping



Arc Fault Pinpoint Positioning

Technical Specification

SUN2000-450W -P

Input

Rated Input DC Power ¹	450 W
Absolute maximum input voltage	80 V
MPPT operating voltage range	8 - 80 V
Maximum Short Circuit Current (I _{sc})	13 A
Max. efficiency	99.5 %
Weighted efficiency	99.0 %
Overvoltage category	II

Output

Max. output voltage	80 V
Max. output current	15 A
Output bypass ²	Yes
Shutdown output voltage per optimizer ³	0 V
Shutdown output impedance per optimizer	1k ohm ± 10 %

Standard Compliance

Safety	IEC62109-1 (class II safety)
RoHS	Yes

General Data

Dimension (W x H x D)	71 x 138 x 25 mm (2.8 x 5.4 x 1.0 inch)
Weight (including cables)	0.55 kg (1.2 lb.)
Installation part (optional)	Grounding Plate, Grounding Lug, PV Module Frame Plate
Input connector	Staubli MC4
Output connector	Staubli MC4
Input wire length	0.15 m (0.5 ft.)
Output wire length	1.2 m (3.9 ft.) ⁴
Operating temperature / humidity range	-40 °C ~ 85 °C ⁵ / 0 %RH ~ 100 %RH
Degree of protection	IP68
Compatible product	SUN2000-2/3/3.68/4/4.6/5/6KTL -L1, SUN2000-3/4/5/6/8/10KTL -M1, SUN2000-12/15/17/20KTL -M2, SUN2000-30/36/40KTL -M3 ⁶

Long String Design (Full Optimizer)

SUN2000-2-6KTL-L1

SUN2000-3-10KTL-M1

SUN2000-12-20KTL-M2

Minimum optimizer number per string	4	6	6
Maximum optimizer number per string	25	50	50
Maximum DC power per string	5,000 W	10,000 W	10,000 W