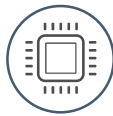


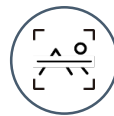
# Smart PV Optimizer



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 <sup>1</sup>   | 450 W    |
| Absolute maximum input voltage      | 80 V     |
| MPPT operating voltage range        | 8 - 80 V |
| Maximum Short Circuit Current (Isc) | 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 <sup>2</sup>                         | Yes           |
| Shutdown output voltage per optimizer <sup>3</sup> | 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                        | MC4   |
| Output connector                       | MC4   |
| Output wire length                     | 1.2 m (3.9 ft.) <sup>4</sup>  |
| Operating temperature / humidity range | -40 °C ~ 85 °C <sup>5</sup> / 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 |

| 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            |

<sup>1</sup> Rated power of the module at STC shall not exceed "Rated Input DC Power" of power optimizer. Modules with power up to +5% power tolerance are acceptable.

<sup>2</sup> Power optimizer is bypassed in the string connected to an operating inverter when it fails to work.

<sup>3</sup> Power optimizer output 0Vdc when disconnecting to the inverter or inverter is shutdown.

<sup>4</sup> Fits PV module in landscape and portrait installation.

<sup>5</sup> Full power capability refers to online smart design tool.