

Smart PV Optimizer



One-Fits-All Optimizer
Easier Business



<5s Module Auto-Mapping



Arc Fault Pinpoint Positioning
Along PV Cable

Technical Specification		SUN2000-600W-P			
		Input			
Rated Input DC Power ¹		600 W			
Absolute maximum input voltage		80 V			
MPPT operating voltage range		10 - 80 V			
Maximum Short Circuit Current (Isc)		14.5 A			
Input Overcurrent Protection		15A			
Max. efficiency		99.5 %			
Weighted efficiency		99.0 %			
Overvoltage category		II			
		Output			
Max. output voltage		80 V ²			
Max. output current		15 A			
Output bypass ³		Yes			
Shutdown output voltage per optimizer		0 V			
Shutdown output impedance per optimizer		1k ohm ± 10 %			
		Communication			
Communication Method		MBUS			
		Standard Compliance			
Safety		IEC62109-1 (class II safety)			
RoHS		Yes			
		General Data			
Dimension (W x H x D)		75 x 140 x 28 mm (3.0 x 5.5 x 1.1 inch)			
Weight (including cables)		0.6 kg (1.3 lb.)			
Installation part (optional)		Frame Mounting Bracket / T-shaped Bolt ⁵			
Input connector		MC4			
Input wire length		0.15m			
Output connector		MC4			
Output wire length		1.3 m (4.3 ft.) ⁶			
Operating temperature / humidity range		-40 °C ~ 85 °C ⁵ / 0 %RH ~ 100 %RH			
Degree of protection		IP68			
Compatible product		SUN2000-5/6KTL-L1, SUN2000-5/6/8/10KTL-M1, SUN2000-8/10/12/15/17/20KTL-M2, SUN2000-29.9/36/40KTL-M3			
Long String Design (Full Optimizer)		SUN2000-2-6KTL-L1	SUN2000-3-10KTL-M1	SUN2000-12-20KTL-M2	SUN2000-30-40KTL-M3
Minimum optimizer number per string ⁷		4	6	6	6
Maximum optimizer number per string		25	35	35	25
Maximum DC power per string ⁸		6,000 W	10,000 W	12,000 W	12,000 W

^{*1} In the STC environment, The rated power of the module shall not exceed 1.05 times of the optimizer rated input power.

^{*2} Power optimizer has the output voltage equal to or less than the actual input voltage from the PV panel it connects to. The maximum capability is 80V.

^{*3} Power optimizer is bypassed in the string connected to an operating inverter when it fails to work

^{*4} Power optimizer output 0Vdc when disconnecting to the inverter or inverter is shutdown.

^{*5} Allow PV module frame installation / extruded aluminum profile installation

^{*6} Fits PV module in landscape and portrait installation.

^{*7} Require standard 60 cells module to meet the inverter minimum startup voltage

^{*8} Full power capability refers to online smart design tool.