Smart Energy Center







Active Safety

Al Powered Active Arcing Protection



Higher Yields

Up to 30% More Energy with Optimizer



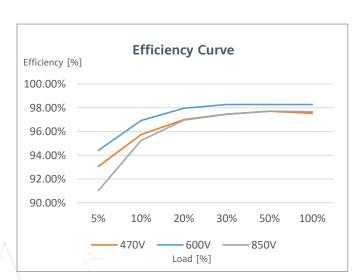
Battery Ready

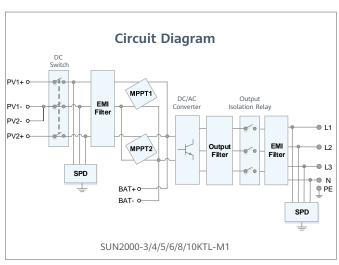
Plug & Play battery interface ¹



Flexible Communication

WLAN, Fast Ethernet, 4G Communication Supported





*1. Will be compatible with HUAWEI smart string ESS in Q1, 2021

Technical Specification

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Technical Specification	SUN2000	SUN2000	SUN2000	SUN2000	SUN2000	SUN2000	
reclinical specification	-3KTL-M1	-4KTL-M1	-5KTL-M1	-6KTL-M1	-8KTL-M1	-10KTL-M1	
			Effici	encv			
Max. efficiency	98.2%	98.3%	98.4%	98.6%	98.6%	98.6%	
European weighted efficiency	96.7%	97.1%	97.5%	97.7%	98.0%	98.1%	
, , ,							
			Input	(PV)			
Recommended max. PV power 1	4,500 Wp	6,000 Wp	7,500 Wp	9,000 Wp	12,000 Wp	15,000 Wp	
Max. input voltage ² Operating voltage range ³			1,10				
Start-up voltage	140 V ~ 980 V 200 V						
Rated input voltage			600				
Max. input current per MPPT	11 A						
Max. short-circuit current	15 A						
Number of MPP trackers Max. input number per MPP tracker			2				
Wax. Input number per Wir Cudeker			'				
			Input (DC	Battery)			
Compatible Battery	HUAWEI Smart String ESS 5kWh – 30kWh						
Operating voltage range	600 V ~ 980 V						
Max operating current Max charge Power			16.00				
Max discharge Power	3,300 W	4,400 W	10,00 5,500 W	6.600 W	8,800 W	10,000 W	
	-,-30	.,		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	-,-30	. 5,000 11	
			Output (0	On Grid)			
Grid connection		Three-phase					
Rated output power	3,000 W	4,000 W	5,000 W	6,000 W	8,000 W	10,000 W	
Max. apparent power Rated output voltage	3,300 VA	4,400 VA	5,500 VA Vac / 380 Vac, 230 Va	6,600 VA	8,800 VA	11,000 VA	
Rated Output Voltage Rated AC grid frequency		220	50 Hz /		NTFL		
Max. output current	5.1 A	6.8 A	8.5 A	10.1 A	13.5 A	16.9 A	
Adjustable power factor			0.8 leading				
Max. total harmonic distortion			≤ 3	%			
		Output	(Backup Powe	r via Backup E	Box-B1)		
Maximum apparent power	3,300 VA						
Rated output voltage	220 V / 230 V						
Maximum output current Power factor range	15 A 0.8 leading 0.8 lagging						
rower factor range			0.0 teading	0.0 tagging			
			Features &	Protections			
Input-side disconnection device	Yes						
Anti-Islanding protection	Yes						
DC reverse polarity protection Insulation monitoring	Yes						
DC surge protection	Yes Yes, compatible with TYPE II protection class according to EN/IEC 61643-11						
AC surge protection	Yes, compatible with TYPE II protection class according to EN/IEC 61643-11						
Residual current monitoring	Yes						
AC overcurrent protection	Yes						
AC short-circuit protection AC overvoltage protection	Yes Yes						
Arc fault protection	Yes						
Ripple receiver control	Yes						
Integrated PID recovery ⁵	Yes						
Battery reverse charging from grid	Yes						
Nighttime Power Consumption			< 5.5	VV S			
			Genera	l Data			
Operating temperature range	-25 ~ + 60 °C (-13 °F ~ 140 °F)						
Relative operating humidity	0 %RH ~ 100 %RH						
Operating altitude	0 ~ 4,000 m (13,123 ft.) (Derating above 2000 m) Natural convection						
Cooling Display		LED			r App		
Communication	LED Indicators; Integrated WLAN + FusionSolar App RS485; WLAN/Ethernet via Smart Dongle-WLAN-FE; 4G / 3G / 2G via Smart Dongle-4G (Optional)						
Weight (incl. mounting bracket)	17 kg (37.5 lb)						
Dimension (incl. mounting bracket)		5	25 x 470 x 146.5 mm (:h)		
Degree of protection			IP6	5			
			Optimizer Co	ompatibility			
DC MBUS compatible optimizer			SUN2000-				
		Ct. I I C	!!/				
Cortificato			ompliance (mor				
Certificate	G98, G99, FN 504		EN/IEC 62109-1, EN/IE R-N-4105, AS 4777, C1			R D4. NRS 097-3	
Grid connection standards	230, 233, 214 304	00, CLI 0 ZI, VDL-AI	IEC61727, IEC62			5-1, 14115 057-2	

IEC61727, IEC62116, DEWA 2.0

*1 Inverter max input PV power is 20,000 Wp when long strings are designed and fully connected with SUN2000-450W-P power optimizers.

*2 The maximum input voltage is the upper limit of the DC voltage. Any higher input DC voltage would probably damage inverter.

*3 Any DC input voltage beyond the operating voltage range may result in inverter improper operating.

*4 C10 / 11: 10,000 VA

*5 SUN2000-3-10KTL-M1 raises potential between PV- and ground to above zero through integrated PID recovery function to recover module degradation from PID. Supported module types include: P-type (mono, poly).

*6 <10 W when PID recovery function is activated Version No.:04-(20201006)