



INTELLIGENT PHOTOVOLTAIC CONTROLLER

SUN2000-15/17/20KTL-M2

Intelligent photovoltaic controller



Active safety

AI-enabled active arc protection
And precise positioning



Higher yield

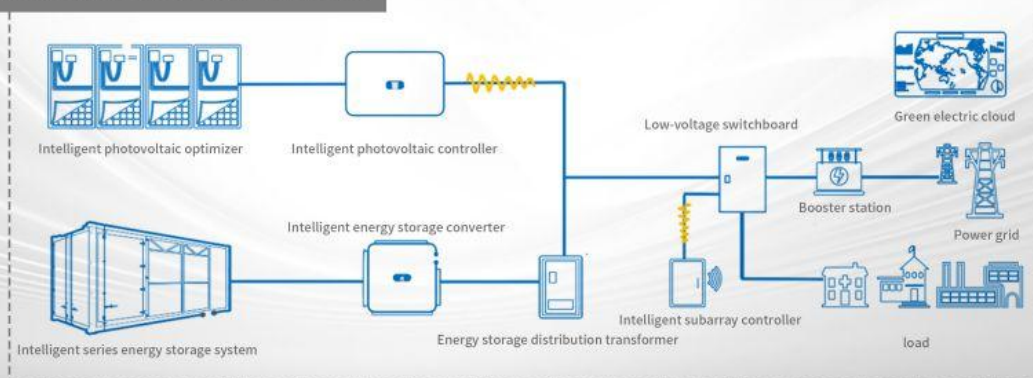
Fit optimizer Up to 30%
increase in power



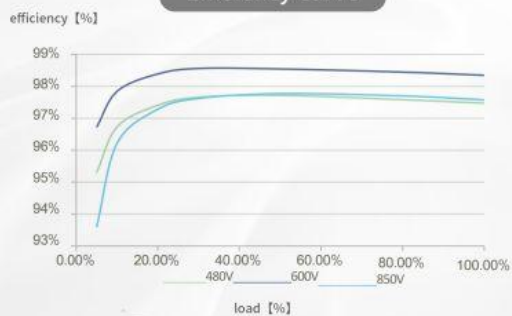
Flexible communication

WLAN support Fast
Ethernet 4G communication

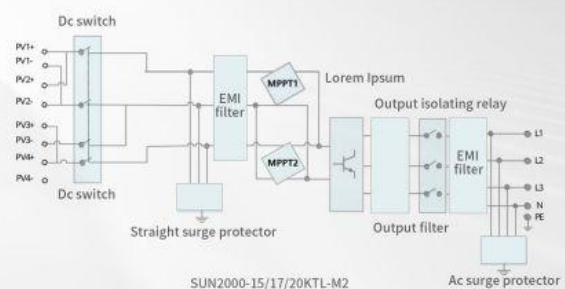
Industry green power solutions



Efficiency curve



Circuit block diagram





SUN2000-15/17/20KTL-M2

Technical parameter		SUN2000-15KTL-M2	SUN2000-17KTL-M2	SUN2000-20KTL-M2
efficiency	Maximum efficiency	98.6%	98.6%	98.6%
	Chinese efficiency	97.8%	97.7%	97.7%
Input	Maximum recommended component power	22.500 Wp	25.500 Wp	30.000 Wp
	Maximum DC input voltage 1	1080 V		
	Operating voltage range 2	160 V ~ 950 V		
	Starting voltage	200 V		
	Rated input voltage	600 V		
	Maximum input current of each MPPT	27 A (two-way) / 18A (Single channel)		
	Maximum short-circuit current	39 A		
	MPPT quantity	2		
	Maximum number of input channels	4		
export	Adaptive network	Three phase		
	Rated output power	15000 W	17000 W	20000 W
	Maximum output apparent power	16500 VA	18700 VA	22000 VA
	Rated output voltage	220 Vac / 380 Vac, 230 Vac / 400 Vac, 3W + N + PE		
	Rated output voltage	50 Hz / 60 Hz		
	Maximum output current	25.2 A	28.5 A	33.5 A
	Power factor	0.8 Look ahead 0.8 hysteresis		
	Maximum total harmonic distortion	< 3 %		
Characterization and protection	Input DC switch	support		
	Antiisland protection	support		
	Ac overcurrent protection	support		
	Ac short circuit protection	support		
	Ac overvoltage protection	support		
	Dc reverse protection	support		
	Straight wandering surge protection	TYPE II		
	Ac surge protection	Yes, equivalent to the TYPE II protection level in EN/IEC 61643-11		
	Residual current detection unit	support		
	AFCI Intelligent arc protection	support		
	Remote power scheduling for dry nodes	support		
	Built-in PID repair 3	support		
Conventional parameter	Operating temperature	-25 ~ +60 °C		
	Operating relative humidity	0 % RH ~ 100% RH		
	Maximum working altitude	4000 m (Derating over 2000m)		
	Cooling mode	Natural convection		
	reveal	LED Pilot lamp: built-in WLAN + FusionSolar APP		
	Can be extended external communication	Standard: Built-in WLAN module, RS485 Optional: WLAN-FE smart communication stick, 4G smart communication stick		
	Weight (including mounting parts)	25 kg		
	Dimensions (including mounting parts)	525 x 470 x 262 mm		
Satisfied criteria	Class of protection	IP65		
	Adaptation optimizer type number	SUN2000-450W-P		
	secure	EN/IEC 62109-1, EN/IEC 62109-2		
	Grid connection standard	NB/T 32004		