



INTELLIGENT PHOTOVOLTAIC CONTROLLER

SUN2000-30/36/40KTL-M3 Intelligent photovoltaic controller



Active safety

Ai-enabled active arc protection
And precise positioning



Higher yield

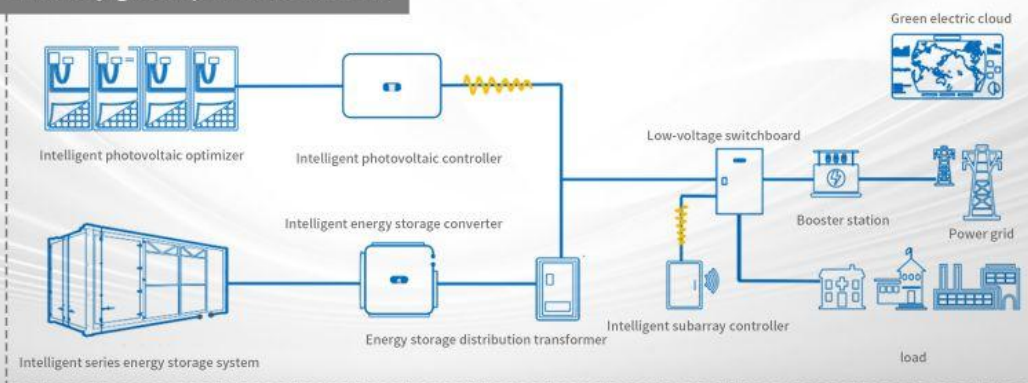
Fit optimizer Up to 30%
increase in power



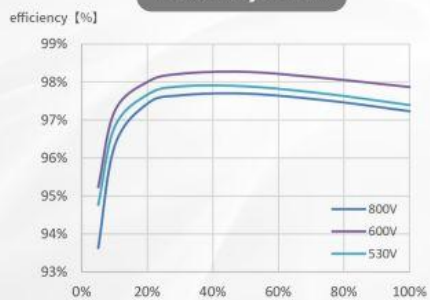
Flexible communication

WLAN support Fast
Ethernet 4G communication

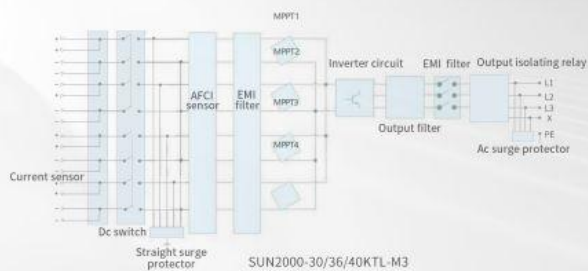
Industry green power solutions



Efficiency curve



Circuit block diagram





SUN2000-30/36/40KTL-M3

Technical parameter		SUN2000-50KTL- ZHM3
efficiency	Maximum efficiency	98.50%
	Chinese efficiency	98.00%
input	Maximum DC input voltage 1	1100 V
	Maximum input current of each MPPT	30A
	Maximum short-circuit current	40 A
	Starting voltage	200 V
	MPPT voltage range 2	200 V ~ 1000 V
	Rated input voltage	600 V
	Maximum number of input channels	39 A
	MPPT quantity	8
	Rated output power	4
	Rated output power	50000 W
export	Maximum output apparent power	55000 VA
	Rated output voltage	380 Vac , 3W / (N)+ PE
	Output voltage frequency	50 Hz
	Rated output current	76.0A/380Vac
	Maximum output current	84.0A/380Vac
	Power factor	0.8 Look ahead 0.8 hysteresis
	Maximum total harmonic distortion	< 3 %
Characterization and protection	AFCI Intelligent arc protection	support
	Component PID repair 3	support
	Input DC switch	support
	Antiisland protection	support
	Output overcurrent protection	support
	Input reverse protection	support
	Cluster fault detection	support
	Straight wandering surge protection	TYPE II
	Ac surge protection	TYPE II
	Insulation impedance detection	support
	Residual current detection	support
	Remote power scheduling for dry nodes	support
communication	reveal	LED Pilot lamp; built-in WLAN + FusionSolar APP
	RS485	support
	Intelligent communication rod	Optional: WLAN-FE smart communication stick, 4G smart communication stick
Conventional parameter	MBUS	Yes (Only in data collection scenarios)
	dimension	640 x 530 x 270 mm
	Operating temperature	-25 ~ + 60 °C
	Operating relative humidity	0% RH ~ 100% RH
	Maximum working altitude	4000 m
	Cooling mode	Intelligent air cooling
	Dc connector	Staubli MC4
	Ac connector	Waterproof PG head + OT/DT terminal
	Weight (including mounting parts)	49 kg
	Class of protection	IP66
	Topological mode	transformerless
	Grid connection standard	NB/T 32004-2013, the front-runner