

Smart Energy Controller



Active Safety

AI Powered
Active Arcing Protection



Higher Yields

Max. Efficiency
Up to 98.4%



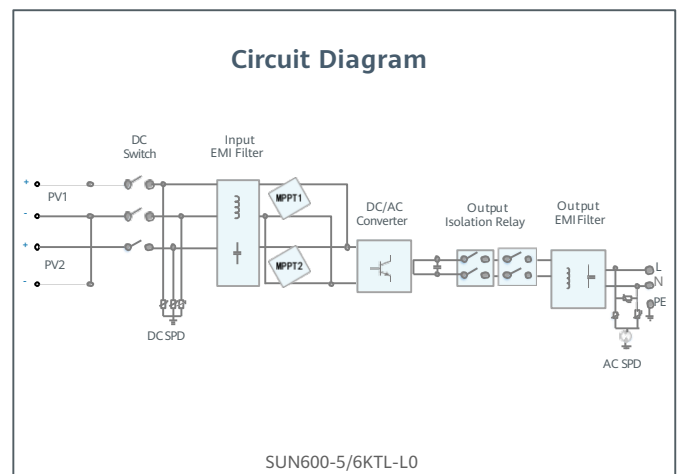
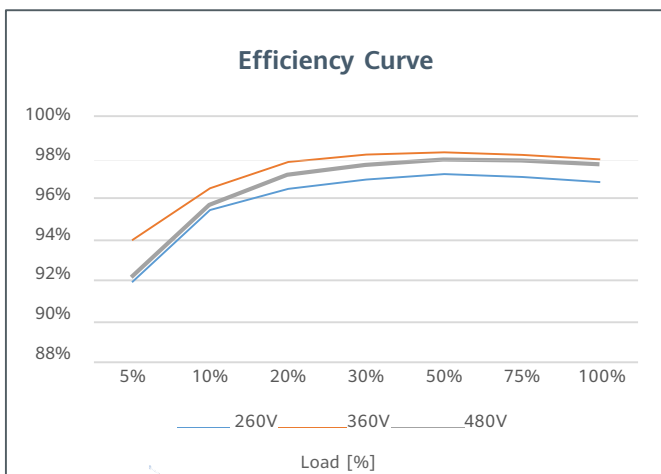
Better Experience

Small & Light
Only 12kg



Safe & Reliable

Fully Sealed design
With IP65



Technical Specification

Technical Specification	SUN600-5KTL-L0	SUN600-6KTL-L0
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Efficiency		
Max. efficiency	98.4 %	97.8 %
European weighted efficiency	97.8 %	97.2 %

Input (PV)		
Recommended max. PV power	6,900 Wp	7,500 Wp
Max. input voltage		600 V
Start-up voltage		100 V
MPPT operating voltage range		90 V – 560 V
Rated input voltage		360 V
Max. input current per MPPT		12.5 A
Max. short-circuit current		18 A
Number of MPP trackers		2
Max. number of inputs		2

Output		
Grid connection		Single phase
Rated output power	4,991 W ¹	6,000 W
Rated apparent output power	4,991 VA ¹	6,000 VA
Max. apparent power	4,999 VA ¹	6,000 VA
Rated output voltage		220 Vac / 230 Vac / 240 Vac
Rated AC grid frequency		50 Hz / 60 Hz
Max. output current	22.7 A ¹	27.3 A
Adjustable power factor		0.8 leading ... 0.8 lagging
Max. total harmonic distortion		≤ 3 %

Protection & Feature		
Anti-islanding protection		Yes
DC reverse polarity protection		Yes
Insulation monitoring		Yes
DC surge protection	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		Yes
AC overvoltage protection		Yes
Over-heat protection		Yes
Arc fault protection		Yes

General Data		
Operating temperature range	-25 ~ +60 °C (Derating above 45°C @ Rated output power)	
Relative operating humidity	0 %RH ~ 100 %RH	
Operating altitude	0 ~ 4,000 m (Derating above 2,000 m)	
Cooling	Natural convection	
Display	LED indicators; integrated WLAN + FusionSolar APP	
Communication	RS485, WLAN via inverter built-in WLAN module Ethernet via Smart Dongle-WLAN-FE (Optional); 4G / 3G / 2G via Smart Dongle-4G (Optional)	
Weight (incl. mounting bracket)	12.0 kg (26.5 lb)	
Dimension (incl. mounting bracket)	365mm * 365mm * 156 mm (14.4 x 14.4 x 6.1 inch)	
Degree of protection	IP65	
Country of Manufacture	China	

Standard Compliance (more available upon request)		
Safety	EN/IEC 62109-1, EN/IEC 62109-2, IEC 63027	
Grid connection standards	IEC-61727-60Hz	