



SOFAR

27.5~33KTL-LV

27500 / 33000

Three-Phase

Three-MPPT



Super large 4-inch LCD



Fuse free design



Outdoor IP65 protection level



Built-in DRM port and logic



Sound and light alarm function



Max. efficiency up to 98.6%



DC SPD Class 2, over/under voltage, over current, over temperature, island and other multiple protections

Datasheet

SOFAR 27500TL-LV

SOFAR 33000TL-LV

Input (DC)

Recommended Max. PV input power	36600W	43900W
Max DC power for single MPPT	22000W	22000W
	16000W	22000W
Number of MPP trackers	3	
Number for DC inputs	4/3/3	4/4/4
Max. input voltage	1000V	
Start-up voltage	350V	
Rated input voltage	600V	
MPPT operating voltage range	250V-950V	
Full power MPPT voltage range	530V-800V	
Max. input MPPT current	40A/30A/30A	40A/40A/40A
Max. input current per string	12A	
Maximum DC input short circuit current per MPPT	48A/36A/36A	48A/48A/48A

Output (AC)

Rated power	27500W	33000W
Max. AC power	27500VA	33000VA
Max. Output current	80A	90A
Nominal grid voltage	3/N/PE, 127/220Vac	
Grid voltage range	187Vac-242Vac (According to local standard)	
Nominal frequency	60Hz	
Grid Frequency range	59Hz-61Hz (According to local standard)	
Active power adjustable range	0~100%	
THDi	<3%	
Power factor	>0.99 (adjustable +/-0.8)	

Performance

Max efficiency	98.5%	98.6%
European weighted efficiency	98.3%	98.4%
Self-consumption at night	<1W	
MPPT efficiency	>99.9%	

Protection

DC reverse polarity protection	Yes
DC switch	Yes
Protection class/ overvoltage category	I/III
Input/ output SPD(III)	PV: type II standard, AC: type II optional
Safety protection	Anti islanding, RCMU, Ground fault monitoring
ARPC	Anti reverse power controller (optional)

Communication

Power management unit	According to certification and request
Standard communication mode	RS485, Wifi/Ethernet/GPRS(optional), SD card, Multi-function relay
Operation data storage	25 years

General Data

Ambient temperature range	-25°C~+60°C	
Topology	Transformer-less	
Degree of protection	IP65	
Allowable relative humidity range	0~100%	
Max. operating altitude	4000m	
Noise	≤60dB	
Weight	68kg	70kg
Cooling	Fan	
Dimension	713*737*297mm	
Display	LCD display	
Warranty	5 years/ 7 years/ 10 years	

Standard

EMC	EN 61000-6-2, EN 61000-6-4, EN 61000-3-11, EN 61000-3-12	
Safety standards	IEC62109-1/2, IEC62116, IEC61727, IEC-61683, IEC60068(1,2,14,30)	
Grid standards	AS/NZS 4777, VDE V 0124-100, V 0126-1-1, VDE-AR-N 4105, BDEW, CEI 0-21/CEI 0-16, UNE 206 007-1, EN50549, G59, EN50530, NB/T32004	