SOFAR
50K~70KTL

50000/ 60000/ 70000

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, Anti-islanding and other multiple protections

Datasheet	SOFAR 50000TL	SOFAR 60000TL	SOFAR 70000TL-HV
Input (DC)			
Recommended Max. PV input power	66500Wp	79800Wp	93100Wp
Max DC power for single MPPT	22000W 16000W 16000W	22000W 22000W 22000W	26000W 26000W 26000W
Number of MPP trackers		3	
Number for DC inputs	4/3/3	4/4/4	4/4/4
Max. input voltage		1000V	
Start-up voltage		350V	
Rated input voltage	600V	600V	700V
MPPT operating voltage range		250V-950V	
Full power MPPT voltage range	530V-800V	530V-800V	660V-800V
Max. input MPPT current	40A/30A/30A	40A/40A/40A	40A/40A/40A
Max. input current pet string		12A	
Maxnimun DC input short circuit current per MPPT	48A/36A/36A	48A	48A
Output (AC)			
Rated power	50000W	60000W	70000W
Max. AC power	50000VA	60000VA	75000VA
Max. Output current	80A	90A	90A
Nominal grid voltage	3/N/PE, 220/380Vac, 230/400Vac, 240/415Vac		3/N/PE or 3/PE, 277/480Vac
Grid voltage range	310Vac-480Vac (According to local standard)		422Vac-528Vac(According to local standard)
Nominal frequency	50/60Hz		
Grid Frequency range	45Hz-55Hz/54Hz-66Hz (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%	98.6%
European weighted efficiency	98.3%	98.4%	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℃～+60℃		
Topology	Transformerless		
Degree of protection	IP65		
Allowable relative humidity range	0～100%		
Max. operating altitude	4000m		
Noise	≤60dB		
Weight	68kg	70kg	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, G99, EN50530, NB/T32004		