



# 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
<b>Input (DC)</b>			
Recommended Max. PV input power	66500Wp	79800Wp	93100Wp
Max DC power for single MPPT	22000W	22000W	26000W
	16000W	22000W	26000W
	16000W	22000W	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 per string		12A	
Maximum DC input short circuit current per MPPT	48A/36A/36A	48A	48A
<b>Output (AC)</b>			
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)	
<b>Performance</b>			
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%	
<b>Protection</b>			
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)	
<b>Communication</b>			
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	
<b>General Data</b>			
Ambient temperature range		-25°C ~ +60°C	
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	
<b>Standard</b>			
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		