



**SOFAR**

# 50K...70KTL

50000 / 60000 / 70000 W

## THREE-PHASE

- Max. efficiency up to 98.6%
- Fuse free design
- DC SPD Class 2, over / under voltage, over current, over temperature, Anti-islanding and other multiple protections

## THREE-MPPT

- IP65 design for outdoor
- Large 4-inch LCD
- Built-in DRM port and logic

Datasheet	SOFAR 50KTL	SOFAR 60KTL	SOFAR 70KTL-HV
<b>Input (DC)</b>			
Recommended max. PV input power (Wp)	66500	79800	93100
Max. DC power for single MPPT (W)	22000 / 16000 / 16000	22000	26000
Number of MPP trackers	3		
Number for DC inputs	4 / 3 / 3	4 / 4 / 4	
Max. input voltage (V)	1000		
Start-up voltage (V)	350		
Rated input voltage (V)	600		700
MPPT operating voltage range (V)	250-950		
Full power MPPT voltage range (V)	530-800		660-800
Max. input MPPT current (A)	40 / 30 / 30	40 / 40 / 40	40 / 40 / 40
Max. input current per string	12		
Maximum DC input short circuit current per MPPT	48 / 36 / 36	48	
<b>Output (AC)</b>			
Rated power (W)	50000	60000	70000
Max. AC power (VA)	50000	60000	75000
Max. output current (A)	80	90	
Nominal grid voltage	3 / N / PE, 220 / 380 Vac, 230 / 400 Vac, 240 / 415 Vac		3 / N / PE or 3 / PE, 277 / 480 Vac
Grid voltage range	310 Vac-480 Vac (according to local standard)		422 Vac-528 Vac (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%	
European weighted efficiency	98,3%	98,4%	
Self-consumption at night (W)	< 1		
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		
Feed-in limitation function	Yes		
<b>Communication</b>			
Power management unit	According to certification and request		
Standard communication mode	RS485 / WiFi / Ethernet, optional: GPRS		
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	
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, VDE-AR-N 4110, BDEW, CEI 0-21 / CEI 0-16, UNE 206 007-1, EN50549, G59, EN50530, NB / T32004		