










SOFAR 80K~136KTL

80KTL/100KTL/100KTL-HV/125KTL-HV/136KTL-HV

Three-Phase

Eight to twelve MPPTs

-  Max. efficiency up to 99%
-  Outdoor IP66 protection level
-  Type II SPD for both DC and AC
-  Support Modbus communication, external Wifi/ PLC/ GPRS (optional)
-  AC / DC dual power supply redundant design, 24-hour status monitoring
-  Remote firmware upgrade
-  I-V curve scanning function
-  Maximum 12 MPP trackers with 1.5* DC overload

Datasheet

**SOFAR
80KTL**

**SOFAR
100KTL**

**SOFAR
100KTL-HV**

**SOFAR
125KTL-HV**

**SOFAR
136KTL-HV**

Input (DC)

Max. input voltage			1100V		
Rated input voltage	600V	600V	680V	680V	680V
Start-up voltage			200V		
MPPT operating voltage range			180V-1000V		
Full power MPPT voltage range	500V-850V	500V-850V	550V-850V	550V-850V	550V-850V
Number of MPP trackers	8	10	10	10	12
Number for DC inputs	16	20	20	20	24
Max. input MPPT current			26A		
Max. DC input short circuit current per MPPT			40A		

Output (AC)

Rated power	80kW	100kW	100kW	125kW	136kW
Max. AC power	88kVA	110kVA	110kVA	137kVA	150kVA
Max. output current	128A	160A	128A	160A	160A
Nominal grid voltage	3/N/PE, 230V/400Vac, 220V/380Vac		3/PE, 288V/500Vac	3/PE, 288V/500Vac	3/PE, 311V/540Vac
Grid voltage range	310Vac-480Vac	310Vac-480Vac	400Vac-575Vac	400Vac-575Vac	432Vac-621Vac
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			1 default (adjustable +/- 0.8)		

Performance

Max. Efficiency	98.60%	98.70%	98.80%	99.00%	99.00%
European weighted efficiency	98.20%	98.30%	98.50%	98.50%	98.51%
Self-consumption at night			<2W		
MPPT efficiency			>99.9%		

Protection

DC reverse polarity protection	Yes
Anti-islanding protection	Yes
Leakage current protection	Yes
Ground fault monitoring	Yes
PV-array string fault monitoring	Yes
Zero voltage ride through	Yes
DC switch	Yes
Anti-PID protection	Optional
AFCI	Optional
Protection class/ Overvoltage category	I/III
Input/ Output SPD	PV: type II standard, AC: type II standard

Communication

Power management unit	According to certification and request
Communication	RS485, Optional: WiFi/GPRS/PLC
Operation data storage	25 years

General Data

Ambient temperature range	-30°C~+60°C				
Topology	Transformerless				
Degree of protection	IP66				
Allowable relative humidity range	0~100%				
Max. operating altitude	4000m				
Noise	≤60 dB				
Weight	72kg	84kg	72kg	84kg	85kg
Cooling	Smart forced air cooling				
Dimension	1051*660*340mm				
Display	LCD&Bluetooth+APP				
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 standard	IEC62109-1/2, IEC62116, IEC61727, IEC-61683, IEC60068(1,2,14,30)				
Grid standard	AS/NZS 4777, VDE V 0124-100, V 0126-1-1, VDE-AR-N 4105, CEI 0-21/CEI 0-16, UNE 206 007-1, EN50549, G99, EN50530, NB/T32004				