

SOFAR 80-125KTLX-G4-ESS

80 / 99 / 100 / 110 / 125 kW

Three-phase hybrid inverter



Battery-ready & Load flexibility

- 200A DC-coupled battery port
- Supports max. 20kW unbalanced load



Flexible PV input

- 9 MPPTs, 40A per MPPT
- 200% PV input power max



Advanced safety

- AFCI arc-fault detection
- DC SPD type I+II surge protection



Outdoor ready

- Engineered with IP66 rating and smart air cooling
- Lightweight for easy transport and installation

Model	SOFAR 80KTLX-G4-ESS	SOFAR 99KTLX-G4-ESS	SOFAR 100KTLX-G4-ESS	SOFAR 110KTLX-G4-ESS	SOFAR 125KTLX-G4-ESS
Input (DC)					
Recommended max. PV input power	160kWp	200kwp	200kWp	220kWp	225kWp
Max. input voltage	1100V				
Rated input voltage	625V				
Start-up voltage	200V				
MPPT operating voltage range	160V-1000V				
Number of MPP trackers	9				
Number for DC inputs	18				
Max. input MPPT current	9×40A				
Max. input short circuit current	9×50A				
Output (AC)					
Rated output power	80kW	99.99kW	100kW	110kW	125kW
Max. output apparent power	88kVA	99.99kVA	110kVA	121kVA	125kVA
Max. output current	133.7A@380V / 127.0A@400V / 122.4A@415V	151.9A@380V / 144.3A@400V / 139.1A@415V	167.1A@380V / 158.7A@400V / 153.0A@415V	183.8A@380V / 174.6A@400V / 168.3A@415V	189.9A@380V / 180.4A@400V / 173.9A@415V
Rated output voltage	3N--+PE, 380/400/415V				
Output voltage range	310-480Vac				
Rated output frequency	50/60Hz				
Output frequency range	45Hz-55Hz/55Hz-65Hz				
Active power adjustable range	0-100%				
THDi	<1% (@100%P)				
Power factor	0.8 leading – 0.8 lagging				
Max. asymmetric power	50%				
Input (BAT)					
Battery type	Lithium-ion				
Number of battery input channels	1				
DC voltage range	600-1000V				
Max. charge power	125kW				
Max. discharge power	88kW	99.99kW	110kW	121kW	125kW
Max. charge current	200A				
Max. discharge current	140.8A	160A	176A	193.6A	200A
BMS communication	RJ45, CAN*2 + DO*1				
Efficiency					
Max. efficiency	98.6%				
European efficiency	98.3%				
Protection					
DC reverse polarity protection	Yes				
Anti-islanding protection	Yes				
Leakage current protection	Yes				
Ground fault monitoring	Yes				
PV-array string fault monitoring	Yes				
DC switch	Yes				
PID recovery	Yes				
AFCI	Yes				
SPD	PV: Type I+II, AC: Type II				
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 (> 3000m derating)				
Weight	80kg				
Cooling	Smart air cooling				
Dimension (W×H×D)	985×710×321mm				
Display	LCD & Bluetooth + APP				
Communication	Ethernet / RS485 / Wi-Fi				
STS communication	RS485, DIO *2				
Standard	EN 62109-1/2, EN IEC 61000-6-2/-4, EN IEC 61000-3-11/-12, EN 62920, EN 50530, IEC 60529, IEC 61727, IEC 62116, EN 50549-1-10/-2-10, PPDS, VDE-AR-N 4105/4110, G99, NC RFG, C10/11, PEA, MEA, AS/NZS 4777.2: 2020				

*All specifications are subject to change without notice.