

**SOFAR**

3.3K~12KTLX-G3

3.3K / 4.4K / 5.5K / 6.6K / 8.8K / 11K / 12K W

THREE-PHASE

- Maximum efficiency 98.6%
- Maximum DC input voltage 1100 V
- Remote firmware upgrade
- Type II SPD for both DC and AC side

DUAL-MPPT

- Low start-up voltage, wide MPPT voltage
- Smart string level monitoring
- Natural cooling, no fans, low noise

Datasheet

Datasheet	SOFAR 3.3KTLX-G3	SOFAR 4.4KTLX-G3	SOFAR 5.5KTLX-G3	SOFAR 6.6KTLX-G3	SOFAR 8.8KTLX-G3	SOFAR 11KTLX-G3	SOFAR 12KTLX-G3
Input (DC)							
Recommended max. PV input power (Wp)	4500	6000	7500	9000	12000	15000	18000
Max. DC power for single MPPT (W)	4500	6000		7500		7500	7500/15000
Number of MPP trackers	2						
Number of DC inputs	1 / 1					1 / 1	1 / 2
Max. input voltage (V)	1100						
Start-up voltage (V)	160						
Rated input voltage (V)	650						
MPPT operating voltage range (V)	140-1000						
Full power MPPT voltage range (V)	160-850	190-850	240-850	290-850	380-850	420-850	460-850
Max. input MPPT current (A)	15 / 15					15 / 15	15 / 30
Max. input short circuit current per MPPT (A)	22.5 / 22.5					22.5 / 22.5	22.5 / 45
Output (AC)							
Rated power (W)	3000	4000	5000	6000	8000	10000	12000
Max. AC power (VA)	3300	4400	5500	6600	8800	11000	13200
Max. output current (A)	5	6.7	8.3	10	13.3	16.7	20
Rated grid voltage	3 / N / PE, 230 / 400 Vac						
Grid voltage range	310 - 480 Vac (according to local standard)						
Rated grid frequency	50 Hz / 60 Hz						
Grid frequency range	45 Hz-55 Hz / 55 Hz-65 Hz (according to local standard)						
Active power adjustable range	0~100%						
THDi	< 3%						
Power factor	1 default (adjustable +/-0.8)						
Performance							
Max. efficiency	98.40%				98.50%		
European efficiency	97.50%				98.00%		
Protection							
DC reverse polarity protection	Yes						
Anti-islanding protection	Yes						
Leakage current protection	Yes						
Ground fault monitoring	Yes						
PV-array string fault monitoring	Yes						
Feed-in limitation function	Yes						
DC switch	Yes						
Input / output SPD	PV: type II standard, AC: type II standard						
Communication							
Standard Communication mode	RS485/Bluetooth Optional: WiFi/Ethernet						
General Data							
Ambient temperature range	-30°C~+60°C						
Self-consumption at night (W)	< 1						
Topology	Transformerless						
Degree of protection	IP65						
Allowable relative humidity range	0~100%						
Max. operating altitude	4000 m						
Noise	< 40 dB						
Weight (kg)	17				18		
Cooling	Natural						
Dimension (mm)	430*385*182						
Display	LCD, App via Bluetooth						
Standard							
EMC	EN 61000-6-1, EN 61000-6-3, EN 61000-3-2, EN 61000-3-3, EN 61000-3-11, EN 61000-3-12						
Safety standards	IEC 62109-1 / 2, IEC62116, IEC 61727, IEC61683, IEC 60068 (1, 2, 14, 30)						
Grid standards	VDE V 0124-100, V 0126-1-1, VDE-AR-N 4105, CEI 0-21 / CEI 0-16, UNE 206 007-1, EN 50549, G98 / G99, EN 50530						

**SOFAR**

15K~24KTLX-G3

15K / 17K / 20K / 22K / 24K W

THREE-PHASE

- Maximum efficiency 98.6%
- Maximum DC input voltage 1100 V
- Type II SPD for both DC and AC side
- 110% long-time overload ability

DUAL-MPPT

- Low start-up voltage, wide MPPT voltage
- Smart string level monitoring
- Remote firmware upgrade

Datasheet	SOFAR 15KTLX-G3	SOFAR 17KTLX-G3	SOFAR 20KTLX-G3	SOFAR 22KTLX-G3	SOFAR 24KTLX-G3
Input (DC)					
Recommended max. PV input power (Wp)	22500	25500	30000	33000	36000
Max. DC power for single MPPT (W)	15000	15000	15000	16500	18000
Number of MPP trackers	2				
Number of DC inputs	2 / 2				
Max. input voltage (V)	1100				
Start-up voltage (V)	160				
Rated input voltage (V)	650				
MPPT operating voltage range (V)	140-1000				
Full power MPPT voltage range (V)	420-850	450-850	480-850	510-850	540-850
Max. input MPPT current (A)	26 / 26				
Max. input short circuit current per MPPT (A)	36 / 36				
Output (AC)					
Rated power (W)	15000	17000	20000	22000	24000
Max. AC power (VA)	16500	18700	22000	24200	26400
Max. output current (A)	23.9	27.1	31.9	35.1	38.3
Rated grid voltage	3 / N / PE, 230 / 400 Vac				
Grid voltage range	310 - 480 Vac (according to local standard)				
Rated grid frequency	50 Hz / 60 Hz				
Grid frequency range	45 Hz-55 Hz / 55 Hz-65 Hz (according to local standard)				
Active power adjustable range	0~100%				
THDi	< 3%				
Power factor	1 default (adjustable +/-0.8)				
Performance					
Max. efficiency	98.60%				
European efficiency	98.20%				
Protection					
DC reverse polarity protection	Yes				
Anti-islanding protection	Yes				
Leakage current protection	Yes				
Ground fault monitoring	Yes				
PV-array string fault monitoring	Yes				
Anti reverse power function	Optional				
DC switch	Yes				
Input / output SPD	PV: type II standard, AC: type II standard				
Communication					
Standard Communication mode	RS485/Bluetooth Optional: WiFi/Ethernet				
General Data					
Ambient temperature range	-30°C~+60°C				
Self-consumption at night (W)	< 1				
Topology	Transformerless				
Degree of protection	IP65				
Allowable relative humidity range	0~100%				
Max. operating altitude	4000 m				
Noise	< 40 dB				
Weight (kg)	20	22		23	
Cooling	Fan				
Dimension (mm)	520*430*189				
Display	LCD, App via Bluetooth				
Standard					
EMC	EN 61000-6-1, EN 61000-6-3,EN 61000-3-11, EN 61000-3-12				
Safety standards	IEC 62109-1 / 2, IEC62116, IEC 61727, IEC61683, IEC 60068 (1, 2, 14, 30)				
Grid standards	VDE V 0124-100, V 0126-1-1, VDE-AR-N 4105, CEI 0-21 / CEI 0-16, UNE 206 007-1, EN 50549, G98 / G99, EN 50530,				

**SOFAR**

25K~50KTLX-G3

25K / 30K / 33K / 36K / 40K / 45K / 50K W

THREE-PHASE

- Up to 4 MPPTs with DC overload capability (up to 150%)
- Type II SPD for both DC and AC side
- Low start-up voltage, wide MPPT voltage range
- I-V curve scanning function

THREE TO FOUR MPPTS

- Max. efficiency up to 98.90%
- Prolonged AC overload capability (110%)
- Compatible with 500 W+ modules
- Intelligent monitoring, remote operation

Datasheet	SOFAR 25KTLX-G3	SOFAR 30KTLX-G3	SOFAR 33KTLX-G3	SOFAR 36KTLX-G3	SOFAR 40KTLX-G3	SOFAR 45KTLX-G3	SOFAR 50KTLX-G3
Input (DC)							
Recommended max. PV input power (Wp)	37500	45000	49500	54000	60000	67500	75000
Max. DC power for single MPPT(W)	25000						
Number of MPP trackers	3				4		
Number of DC inputs	2 for each MPPT						
Max. input voltage (V)	1100						
Start-up voltage (V)	200						
Rated input voltage (V)	620						
MPPT operating voltage range (V)	180-1000						
Full power MPPT voltage range (V)	480–850		510-850	540–850	480–850	510–850	540–850
Max. input MPPT current (A)	3*40				4*40		
Max. input short circuit current per MPPT (A)	3*50				4*50		
Output (AC)							
Rated power (W)	25000	30000	33000	36000	40000	45000	50000
Max. AC power (VA)	28000	34000	37000	40000	44000	50000	55000
Max. output current (A)	42.4	51.5	56.0	60.6	66.7	75.8	83.3
Rated grid voltage	3 / N / PE, 230 V / 400 Vac						
Grid voltage range	310 - 480 Vac (according to local standard)						
Rated grid frequency	50 Hz / 60 Hz						
Grid frequency range	45 Hz–55 Hz / 55 Hz–65 Hz (according to local standard)						
Active power adjustable range	0~100%						
THDi	< 3%						
Power factor	1 default (adjustable +/-0.8)						
Performance							
Max. efficiency	98.60%				98.80%		
European efficiency	98.20%						
Protection							
DC reverse polarity protection	Yes						
Anti-islanding protection	Yes						
Leakage current protection	Yes						
Ground fault monitoring	Yes						
PV-array string fault monitoring	Yes						
Feed-in limitation function	Yes						
DC switch	Yes						
Input / output SPD	PV: type II standard, AC: type II standard						
Communication							
Standard Communication mode	RS485/Bluetooth Optional: WiFi/Ethernet						
General Data							
Ambient temperature range	-30°C~+60°C						
Self-consumption at night (W)	<3						
Topology	Transformerless						
Degree of protection	IP65						
Allowable relative humidity range	0~100%						
Max. operating altitude	4000 m						
Noise	< 60 dB						
Weight (kg)	36				37		
Cooling	Fan						
Dimension (mm)	585*480*220						
Display	LCD, App via Bluetooth						
Standard							
EMC	EN 61000-6-1, EN 61000-6-2,EN 61000-6-3, EN 61000-6-4						
Safety standards	IEC 62109-1/2, IEC 62116, IEC 61727, IEC 61683, IEC 60068(1,2,14,30), IEC 60255						
Grid standards	VDE V 0124-100, V 0126-1-1, VDE-AR-N 4105, CEI 0-21/CEI 0-16, UNE 206 007-1, EN 50549, G98/G99, EN 50530						



SOFAR

60K~80KTLX-G3

60K / 80K W

THREE-PHASE

- Max. efficiency up to 98.7%
- Compatible with 500 W+ PV modules
- Type II SPD for both DC and AC side
- Supports Modbus Communication, external WiFi
- Low start-up voltage, wide MPPT voltage range

SIX MPPTS

- Remote firmware upgrade
- I-V curve scanning function
- 6 MPP trackers with 1.5 times DC over load
- Longtime 110% AC overload ability

Datasheet

SOFAR
60KTLX-G3SOFAR
80KTLX-G3

Input (DC)		
Recommended max. input power (Wp)	90000	120000
Number of MPP trackers	6	
Number of DC inputs	2 per MPPT	
Max. input voltage (V)	1100	
Start-up voltage (V)	200	
Rated input voltage (V)	620	
MPPT operating voltage range (V)	180-1000	
Full power MPPT voltage range (V)	550-800	
Max. input MPPT current (A)	6*32	6*40
Max. input short circuit current (A)	6*50	6*60
Output (AC)		
Rated power (W)	60000	80000
Max. AC power (VA)	66000	88000
Max. output current (A)	100	133.3
Rated grid voltage	3 / N / PE, 230 / 400 Vac	
Grid voltage range	310 - 480 Vac (according to local standard)	
Rated grid frequency	50 / 60 Hz	
Grid frequency range	45 Hz-55 Hz / 55 Hz-65 Hz (according to local standard)	
Active power adjustable range	0~100%	
THDi	< 3%	
Power factor	1 default (adjustable +/-0.8)	
Performance		
Max. efficiency	98.70%	
European efficiency	98.20%	
Protection		
DC reverse polarity protection	Yes	
Anti-islanding protection	Yes	
Leakage current protection	Yes	
Ground fault monitoring	Yes	
PV-array string fault monitoring	Yes	
Anti reverse power function	Yes	
DC switch	Yes	
Input / output SPD	PV: type II standard, optional: type I. AC: type II standard	
Communication		
Communication	RS485/Bluetooth Optional: WiFi/Ethernet	
General Data		
Ambient temperature range	-30°C~+60°C	
Self-consumption at night (W)	< 2	
Topology	Transformerless	
Degree of protection	IP66	
Allowable relative humidity range	0~100%	
Max. operating altitude	4000 m	
Weight (kg)	50	
Cooling	Fan	
Dimension (mm)	687*561*275	
Display	LCD, App via Bluetooth	
Standard		
EMC	EN 61000-6-2, EN 61000-6-3, EN 61000-3-11, EN 61000-3-12	
Safety standards	IEC 62109-1/2, IEC 62116, IEC 61727, IEC 61683, IEC 60068 (1,2,14,30), IEC 60255	
Grid standards	VDE V 0124-100, V 0126-1-1, VDE-AR-N 4105, CEI 0-21 / CEI 0-16, UNE 206 007-1, EN 50549, G99, EN 50530	

**SOFAR**

100K~110KTL

100K / 110K W

THREE-PHASE

- Max. efficiency up to 98.75%
- IP66 design for outdoor
- Type II SPD for both DC and AC side
- Supports Modbus Communication, external WiFi

TEN TO TWELVE MPPTS

- Remote firmware upgrade
- I-V curve scanning function
- Maximum 12 MPP trackers with 1.5 times DC overload
- AC / DC dual power supply redundant design, 24-hour status monitoring

Datasheet

SOFAR
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110KTL

Input (DC)		
Max. input voltage (V)	1100	
Rated input voltage (V)	625	
Start-up voltage (V)	200	
MPPT operating voltage range (V)	180-1000	
Full power MPPT voltage range (V)	500-850	
Number of MPP trackers	10	
Number for DC inputs	20	
Max. input current per MPPT (A)	26	
Max. input short circuit current per MPPT (A)	40	
Output (AC)		
Rated power (kW)	100	110
Max. AC power (kVA)	110	121
Max. output current (A)	160	175
Rated grid voltage	3 / N / PE, 230 / 400 Vac	
Grid voltage range	310 - 480 Vac	
Rated grid frequency	50 / 60 Hz	
Grid frequency range	45 Hz-55 Hz / 55 Hz-65 Hz (according to local standard)	
Active power adjustable range	0~100%	
THDi	< 3%	
Power factor	1 default (adjustable +/-0.8)	
Performance		
Max. efficiency	98.70%	98.75%
European efficiency	98.30%	
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	
Input / output SPD	PV: type II standard, AC: type II standard	
Communication		
Communication	RS485/Bluetooth, Optional: WiFi/Ethernet	
General Data		
Ambient temperature range	-30°C~+60°C	
Topology	Transformerless	
Degree of protection	IP66	
Allowable relative humidity range	0~100%	
Max. operating altitude	4000 m	
Weight (kg)	90	
Cooling	Smart forced air cooling	
Dimension (mm)	995.5*663.5*368	
Display	LCD, App via Bluetooth	
Standard		
EMC	EN 61000-6-2, EN 61000-6-4, EN 61000-3-11, EN 61000-3-12	
Safety standards	IEC 62109-1 / 2, IEC62116, IEC 61727, IEC 61683, IEC 60068 (1, 2, 14, 30)	
Grid standards	VDE V 0124-100, V 0126-1-1, VDE-AR-N 4105, CEI 0-21 / CEI 0-16, UNE 206 007-1, EN 50549, G99, EN 50530	

**SOFAR**

255KTL-HV

255 KW

THREE-PHASE

- 12 MPPTs with max. efficiency up to 99.02%
- Built-in Anti-PID
- Type II SPD for both DC and AC
- AC / DC dual power supply redundant design, 24-hour status monitoring

TWELVE MPPTS

- I-V curve scanning function
- IP66 and C5 protection design for outdoor
- Compatible with Al and Cu AC cables
- Touch free commissioning and remote firmware upgrade

Datasheet

SOFAR
255KTL-HV

Input (DC)	
Max. input voltage (V)	1500
Rated input voltage (V)	1160
Start-up voltage (V)	550
MPPT operating voltage range (V)	500-1500
Full power MPPT voltage range (V)	800-1300
Number of MPP trackers	12
Number for DC inputs	24
Max. input MPPT current (A)	30*12
Max. input short circuit current (A)	50*12
Output (AC)	
Rated grid voltage	3 / PE, 800 Vac
Grid voltage range	640 Vac-920 Vac
Rated grid frequency	50 / 60 Hz
Grid frequency range	45-55 Hz / 55-65 Hz (according to local standard)
Active power adjustable range	0~100%
THDi	< 3%
Power factor	1 default (adjustable +/-0.8)
Performance	
Max. efficiency	99.02%
European efficiency	98.70%
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 function	Yes
Input / output SPD	PV: type II standard, AC: type II standard
Communication	
Communication	RS485/Bluetooth Optional: WiFi/Ethernet
General Data	
Ambient temperature range	-30°C~+60°C
Self-consumption at night (W)	< 2
Topology	Transformerless
Degree of protection	IP66
Allowable relative humidity range	0~100%
Max. operating altitude	5000 m (>4000 m derating)
Weight (kg)	99
Cooling	Smart forced air cooling
Dimension (mm)	1100.5*713.5*368
Display	LCD, App via Bluetooth
Standard	
EMC	EN 61000-6-2, EN 61000-6-4, EN 61000-3-11, EN 61000-3-12
Safety standards	IEC 62109-1 / 2, IEC62116, IEC 61727, IEC 61683, IEC 60068 (1, 2, 14, 30)
Grid standards	VDE V 0124-100, V 0126-1-1, VDE-AR-N 4105, CEI 0-21 / CEI 0-16, UNE 206 007-1, EN 50549, G99, EN 50530