

SOFAR 20k~33kTL-G2

20000/ 25000/ 30000/ 33000



Three-Phase Dual-MPPT

- 4"

Super large 4-inch LCD
- 1100v

1100V voltage level design
- DRM

Built-in DRM port and logic
- 98.6%

Max. efficiency up to 98.6%
- I-V

I-V curve scanning function
- SPD

Built-in SPD, over / under **voltage**, over current, over temperature, island and other multiple protections

Datasheet

Datasheet	SOFAR 20000TL-G2	SOFAR 25000TL-G2	SOFAR 30000TL-G2	SOFAR 33000TL-G2
Input (DC)				
Recommended Max. PV input power	26600Wp	33250Wp	39900Wp	43890Wp
Max DC power for single MPPT	13000W	16000W	18000W	20000W
Number of MPP trackers	2			
Number for DC inputs	2 for each MPPT	3 for each MPPT	3 for each MPPT	3 for each MPPT
Max. input voltage	1100V			
Start-up voltage	250V			
Rated input voltage	620V			
MPPT operating voltage range	230V-960V			
Full power MPPT voltage range	480V-850V	460V-850V	520V-850V	580V-850V
Max. input MPPT current	24A/24A	28A/28A	30A/30A	30A/30A
Maximun DC input short circuit current per MPPT	30A	35A	37.5A	37.5A
Output (AC)				
Rated power	20000W	25000W	30000W	33000W
Max. AC power	22000VA	27500VA	33000VA	36300VA
Max. Output current	32A	40A	48A	53A
Nominal grid voltage	3/N/PE, 220/380Vac, 230/400Vac, 240/415Vac			
Grid voltage range	310Vac-480Vac (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)			
Performance				
Max efficiency	98.2%	98.4%	98.4%	98.6%
European weighted efficiency	98.0%	98.2%	98.2%	98.2%
Self-consumption at night	<1W			
MPPT efficiency	>99.9%			
Protection				
DC reverse polarity protection	Yes			
DC switch	Yes			
Protection class/ overvoltage category	I/III			
Safety protection	Anti islanding, RCMU, Ground fault monitoring			
ARPC	Anti reverse power controller (optional)			
Communication				
Power management unit	According to certification and request			
Standard communication mode	RS485, Wifi/Ethernet/GPRS(optional), SD card			
Operation data storage	25 years			
General Data				
Ambient temperature range	-25℃~+60℃			
Topology	Transformer-less			
Degree of protection	IP65			
Allowable relative humidity range	0~100%			
Max. operating altitude	2000m			
Noise	<30dB	<45dB	<45dB	<45dB
Weight	37kg			
Cooling	Natural	Fan	Fan	Fan
Dimension	666*512*254mm			
Display	LCD display			
Warranty	10 years			
Standard				
EMC	EN 61000-6-2, EN 61000-6-3, EN 61000-3-11, EN 61000-3-12			
Safety standards	IEC62109-1/2, IEC62116, IEC61727, IEC-61683, IEC60068(1,2,14,30), IEC60255			
Grid standards	AS/NZS 4417, VDE V 0124-100, V 0126-1-1, VDE-AR-N 4105, CEI 0-21/CEI 0-16, EN 50549, G59, P.O. 12.3, RD 1699, UTE C15-712-1, EN 50530, NB/T32004			



SOFAR

30k~36kTL

30000/ 33000/ 36000

Three-Phase Dual-MPPT

- 4"

Super large 4-inch LCD
- Fuse free design
- Outdoor IP65 protection level
- I-V curve scanning function
- 98.7%

Max. efficiency up to 98.7%
- Support Modbus communication, external Wifi/ Ethernet/ GPRS (optional)

Datasheet	SOFAR 30000TL	SOFAR 33000TL	SOFAR 36000TL
Input (DC)			
Recommended Max. PV input power	39900Wp	43890Wp	47880Wp
Max DC power for single MPPT	15360W	17000W	20400W
Number of MPP trackers	2		
Number for DC inputs	4 for each MPPT		
Max. input voltage	1000V		
Start-up voltage	350V		
Rated input voltage	600V	600V	600V
MPPT operating voltage range	250V-960V		
Full power MPPT voltage range	480V-800V	480V-800V	500V-800V
Max. input MPPT current	32A/32A	35A/35A	38A/38A
Max. input current per string	12A		
Maximun DC input short circuit current per MPPT	40A	40A	42A
Output (AC)			
Rated power	30000W	33000W	36000W
Max. AC power	30000VA	33000VA	36000VA
Max. Output current	43A	48A	54A
Nominal grid voltage	3/N/PE, 220/380Vac, 230/400Vac, 240/415Vac		
Grid voltage range	310Vac-480Vac (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)		
Performance			
Max efficiency	98.5%	98.5%	98.5%
European weighted efficiency	98.2%	98.2%	98.2%
Self-consumption at night	<1W		
MPPT efficiency	>99.9%		
Protection			
DC reverse polarity protection	Yes		
DC switch	Yes		
Protection class/ overvoltage category	I/III		
Safety protection	Anti islanding, RCMU, Ground fault monitoring		
ARPC	Anti reverse power controller (optional)		
Input/output SPD (II)	Optional		
Communication			
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		
General Data			
Ambient temperature range	-25℃~+60℃		
Topology	Transformer-less		
Degree of protection	IP65		
Allowable relative humidity range	0~100%		
Max. operating altitude	2000m		
Noise	<30dB	<45dB	<45dB
Weight	50kg		
Cooling	Natural	Fan	Fan
Dimension	774*564*298mm		
Display	LCD display		
Warranty	10 years		
Standard			
EMC	EN 61000-6-2, EN 61000-6-4		
Safety standards	IEC62109-1/2, IEC62116, IEC61727, IEC-61683, IEC60068(1,2,14,30)		
Grid standards	AS/NZS 4777, AS/NZS 61000, VDE V 0124-100, V 0126-1-1, VDE-AR-N 4105, CEI 0-21/CEI 0-16, EN50549, G59, Rd1699, UTE C15-712-1, EN50530		



SOFAR 50k~60kTL

50000/ 60000



Three-Phase Three-MPPT

- 4"

Super large 4-inch LCD
- Outdoor IP65 protection level
- Sound and light alarm function
- Fuse free design
- DRM

Built-in DRM port and logic
- 98.6%

Max. efficiency up to 98.6%
- DC SPD Class 2, over/under voltage, over current, over temperature, island and other multiple protections

Datasheet	SOFAR 50000TL	SOFAR 60000TL
Input (DC)		
Recommended Max. PV input power	66500Wp	79800Wp
Max DC power for single MPPT	22000W 16000W 16000W	22000W 22000W 22000W
Number of MPP trackers		3
Number for DC inputs	4/3/3	4/4/4
Max. input voltage		1000V
Start-up voltage		350V
Rated input voltage	600V	600V
MPPT operating voltage range		250V-950V
Full power MPPT voltage range	530V-800V	530V-800V
Max. input MPPT current	40A/30A/30A	40A/40A/40A
Max. input current pet string		12A
Maximun DC input short circuit current per MPPT	48A/36A/36A	48A
Output (AC)		
Rated power	50000W	60000W
Max. AC power	50000VA	60000VA
Max. Output current	80A	90A
Nominal grid voltage	3/N/PE, 220/380Vac, 230/400Vac, 240/415Vac	
Grid voltage range	310Vac-480Vac (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)
Performance		
Max efficiency	98.5%	98.6%
European weighted efficiency	98.3%	98.4%
Self-consumption at night		< 1W
MPPT efficiency		> 99.9%
Protection		
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)
Communication		
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
General Data		
Ambient temperature range		-25°C ~ +60°C
Topology		Transformer-less
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		10 years
Standard		
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



SOFAR 80K~136KTL

80KTL/100KTL/110KTL/100KTL-HV/125KTL-HV/136KTL-HV



Three-Phase Eight to twelve MPPTs

- 99%

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 110KTL	SOFAR 100KTL-HV	SOFAR 125KTL-HV	SOFAR 136KTL-HV
Input (DC)						
Max. input voltage	1100V					
Rated input voltage	625V	625V	625V	725V	725V	785V
Start-up voltage	200V					
MPPT operating voltage range	180V-1000V					
Full power MPPT voltage range	500V-850V	500V-850V	500V-850V	550V-850V	550V-850V	550V-850V
Number of MPP trackers	8	10	10	10	10	12
Number for DC inputs	16	20	20	20	20	24
Max. input current per MPPT	26A					
Max. input short circuit current per MPPT	40A					
Output (AC)						
Rated power	80kW	100kW	110kW	100kW	125kW	136kW
Max. AC power	88kVA	110kVA	121kVA	110kVA	137kVA	150kVA
Max. output current	128A	160A	175A	128A	160A	160A
Nominal grid voltage	3/N/PE, 230V/400Vac, 220V/380Vac			3/PE, 500Vac	3/PE, 500Vac	3/PE, 540Vac
Grid voltage range	310Vac-480Vac	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%	98.75%	98.80%	99.00%	99.00%
European weighted efficiency	98.20%	98.30%	98.30%	98.50%	98.50%	98.51%
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					
Weight	88kg	90kg	90kg	90kg	90kg	92kg
Cooling	Smart forced air cooling					
Dimension	995.5*663.5*368mm					
Display	LCD&Bluetooth+APP					
Warranty	5 years/ 7 years/ 10 years					
Standard						
EMC	EN 61000-6-2, EN 61000-6-4					
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					