



SOFAR 1.1k~3.3kTL-G3

1100/1600/2200/2700/3000/3300

Single-Phase

Single-MPPT

40%

40% DC oversizing



IP65 ingress protection

97.7%

Max. efficiency up to 97.7%



Light weight, quick and easy to install



Built-in zero export function



Smart monitoring, RS485, Wifi/Ethernet/GPRS(optional)



Datasheet

SOFAR
1100TL-G3SOFAR
1600TL-G3SOFAR
2200TL-G3SOFAR
2700TL-G3SOFAR
3000TL-G3SOFAR
3300TL-G3

Input (DC)

Recommended PV input power	1500W	2200W	3000W	3700W	4100W	4500W
Max. Input voltage	500V	500V	500V	550V	550V	550V
Aux. Open voltage	60V					
Start-up input voltage	70V					
Rated input voltage	360V					
MPPT voltage range	50-500V	50-500V	50-500V	50-550V	50-550V	50-550V
Full load DC voltage range	110-450V	150-450V	200-450V	250-500V	275-500V	300-500V
Max. Input current MPPT	12A					
Maximum DC input short circuit current per MPPT	15A					
Number of MPPT/ String per MPPT	1/1					
Input terminal type	MC4/H4					

Output (AC)

Rated power	1100W	1600W	2200W	2700W	3000W	3300W
Max. AC power	1100VA	1600VA	2200VA	2700VA	3000VA	3300VA
Rated Output current	4.8A	7A	9.6A	11.8A	13A	14.3A
Max. Output current	5.3A	7.7A	10.6A	13A	14.5A	16A
Nominal grid voltage	L/N/PE, 220Vac, 230Vac, 240Vac					
Grid voltage range	180Vac-276Vac (According to local standard)					
Nominal frequency	50Hz/60Hz					
Grid frequency range	45~55Hz/54~66Hz (According to local standard)					
THDi	<3%					
Power factor	1 default (adjustable +/-0.8)					

Efficiency

Max. Efficiency	97.5%	97.5%	97.5%	97.7%	97.7%	97.7%
European weighted efficiency	96.9%	96.9%	96.9%	97.2%	97.2%	97.2%
MPPT adaptation efficiency	>99.9%					

Protection

Anti-Islanding protection	Yes
DC reverse polarity protection	Yes
Over temp protection	Yes
Leakage current protection	Yes
Over voltage protection	Yes
Over current protection	Yes
Earth fault protection	Yes
SPD	MOV: Type III standard

Communication

Standard communication mode	RS485, WiFi/GPRS/Ethernet(optional), USB
Operation data storage	25 Years

General Data

Topology	Transformerless	
Ambient temperature range	-30°C ~ +60°C	
Allowable relative humidity range	0~100%	
Noise	<25dB	
DC switch	optional	
Cooling	Natural convection	
Max. Operating altitude	2000m	
Dimension	303*260.5*118mm	321*260.5*131.5mm
Support bracket	Wall-mounted	
Weight	5.5kg	6.3kg
Display	LCD+LED	
Degree of protection	IP65	
Warranty	5 years/ 7 years/ 10 years	

Standard

EMC	EN 61000-6-1, EN 61000-6-2, EN 61000-6-3, EN 61000-6-4,
Safety standards	IEC 62116, IEC 61727, IEC 61683, IEC 60068(1,2,14,30), IEC 62109-1/2
Grid standards	AS 4777, VDE V 0124-100, VDE V 0126-1-1, VDE-AR-N 4105, EN 50438, G83/2, C10/11, RD 1699



SOFAR 1k~3kTL

1100/ 1600/ 2200/ 2700/ 3000

Single-Phase

Single-MPPT



Easy installation



IP65 ingress protection



Max. efficiency up to 97.2%



Super large 4-inch LCD



Wide input voltage operation range



Smart monitoring, RS485, Wifi/Ethernet/GPRS (optional)



Datasheet	SOFAR 1100TL	SOFAR 1600TL	SOFAR 2200TL	SOFAR 2700TL	SOFAR 3000TL
Input (DC)					
Recommended PV input power	1200W	1800W	2400W	2900W	3300W
Max. Input voltage	450V	450V	500V	500V	500V
Number of MPPT/ String per MPPT	1/1				
Start-up input voltage	100V	100V	120V	120V	120V
Rated input voltage	360V				
MPPT voltage range	80-450V	80-450V	100-500V	100-500V	100-500V
Full load DC voltage range	110-450V	165-450V	170-500V	200-500V	200-500V
Max. Input current	10A	10A	13A	13.5A	15A
Maximun DC input short circuit current per MPPT	12.5A	12.5A	16.5A	17A	19A
Output (AC)					
Rated power	1000W	1550W	2100W	2600W	3100W
Max. AC power	1000VA	1550VA	2100VA	2600VA	3100VA
Max. AC output current	4.5A	7A	9.5A	11.5A	13A
Nominal grid voltage	L/N/PE, 220Vac, 230Vac, 240Vac				
Grid voltage range	180Vac-276Vac (According to local standard)				
Nominal frequency	50Hz/60Hz				
Grid frequency range	45Hz-55Hz/54Hz-66Hz (According to local standard)				
THDi	< 3%				
Power factor	1 default (adjustable +/- 0.8)				
Power limit export	Zero export or adjustable power limit export				
Efficiency					
Max. Efficiency	97.0%	97.0%	97.0%	97.1%	97.2%
European weighted efficiency	95.2%	95.9%	96.1%	96.4%	96.5%
MPPT adaptation efficiency	> 99.9%				
Protection					
Anti-Islanding protection	Yes				
DC reverse polarity protection	Yes				
Over temp protection	Yes				
Leakage current protection	Yes				
Over voltage protection	Yes				
Over current protection	Yes				
Earth fault protection	Yes				
SPD	MOV: Type III standard				
Communication					
Standard communication mode	Rs485, WiFi/Ethernet/GPRS(optional), SD card(optional)				
Operation data storage	25 Years				
I/O	Yes				
General Data					
Topology	Transformerless				
Ambient temperature range	-30°C~ +60°C				
Allowable relative humidity range	0~ 100%				
Noise	<25dB				
DC Switch	Optional				
Cooling	Natural				
Max. Operating altitude	2000m				
Dimension	405*314*135mm				
Self-consumption at night	< 1W				
Weight	11kg	11kg	12kg	12kg	12kg
Display	LCD display				
Degree of protection	IP65				
Warranty	5 years/ 7 years/ 10 years				
Standard					
EMC	EN 61000-6-2, EN 61000-6-3, EN 61000-3-2, EN 61000-3-3				
Safety standards	IEC62109-1/2, IEC62116, IEC61727, IEC-61683, IEC60068(1,2,14,30)				
Grid standards	AS/NZS 4777, VDE V 0124-100, VDE V 0126-1-1, VDE-AR-N 4105, CEI 0-21, EN50438/EN50549, G98/G83, C10/11, RD1699, UTE C15-712-1; ABNT NBR 16149/16150 (for SOFAR3000TL)				



SOFAR 3k~6kTLM

3000/3680/4000/4600/5000/6000



Single-Phase Dual-MPPT

- 0** Built-in zero export function
- IP65** ingress protection
- Smart monitoring**, RS485, Wifi/Ethernet/GPRS (optional)
- I-V** curve scanning function
- 4"** Super large 4-inch LCD



Datasheet	SOFAR 3000TLM	SOFAR 3680TLM	SOFAR 4000TLM	SOFAR 4600TLM	SOFAR 5000TLM	SOFAR 6000TLM
Input (DC)						
Recommended PV input power	3300W	4000W	4400W	5000W	5500W	6600W
Max DC power for single MPPT	2000W	2400W	2600W	3000W	3000W	3150W
Number of independent MPPT	2					
Number of DC inputs	1 for each MPPT					
Max. Input voltage	600V					
Start-up input voltage	100V	120V	120V	120V	120V	120V
Rated input voltage	360V					
MPPT voltage range	80-580V	100-580V	100-580V	100-580V	100-580V	100-580V
Full load DC voltage range	160V-520V	165V-520V	165V-520V	165V-520V	175V-520V	250V-520V
Max. Input current per MPPT	10A/10A	12A/12A	13A/13A	15A/15A	15A/15A	15A/15A
Maximun DC input short circuit current per MPPT	12A	14A	16A	18A	18A	18A
Output (AC)						
Rated power	3000W	3680W	4000W	4600W	5000W	6000W
Max. AC power	3000VA	3680VA	4000VA	4600VA	5000VA	6000VA
Max. Output current	13A	16A	17.5A	20A	22A	26A
Nominal grid voltage	L/N/PE, 220Vac, 230Vac, 240Vac					
Grid voltage range	180Vac-276Vac (According to local standard)					
Nominal frequency	50Hz/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)					
Power limit export	Zero export or adjustable power limit export					
Performance						
Max efficiency	97.6%					
European weighted efficiency	97.1% / 97.3%					
Self-consumption at night	<1W					
MPPT efficiency	>99.9%					
Protection						
DC reverse polarity protection	Yes					
DC switch	Optional					
Protection class/overvoltage category	I/III					
Input/output MOV (II)	Yes					
Safety protection	Anti islanding, RCMU, Ground fault monitoring					
SPD	MOV: Type III standard					
Communication						
Power management unit	According to certification and request					
Standard communication mode	RS485, Wifi/Ethernet/GPRS, SD card(optional)					
Operation data storage	25 years					
General Data						
Ambient temperature range	-25°C~ +60°C					
Topology	Transformerless					
Degree of protection	IP65					
Allowable relative humidity range	0~100%					
Max. Operating altitude	2000m					
Noise	<25dB					
Weight	18kg	18kg	18kg	19kg	19kg	19kg
Cooling	Natural					
Dimension	344*478*170mm					
Display	LCD display					
Warranty	5 years/ 7 years/ 10 years					
Standard						
EMC	EN 61000-6-2, EN 61000-6-3, EN 61000-3-2, EN 61000-3-3, 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, CEI 0-21, EN50438/EN50549, G83/G59, C10/11, RD1699, UTE C15-712-1					










SOFAR 3k~7.5kTL-G2

3000/3600/4000/4600/5000/6000/7500



Single-Phase Dual-MPPT

-  Built-in zero export function
-  IP65 ingress protection
-  Max. efficiency up to 98.2%
-  Smart monitoring, RS485, Wifi/Ethernet/GPRS (optional)
-  2 MPPT high precision string detection
-  I-V curve scanning function
-  Built-in sound and light alarm function



Datasheet

SOFAR
3KTLM-G2SOFAR
3.6KTLM-G2SOFAR
4KTLM-G2SOFAR
4.6KTLM-G2SOFAR
5KTLM-G2SOFAR
6KTLM-G2SOFAR
7.5KTLM

Input (DC)

Recommended PV input power	3500W	4000W	4400W	5000W	5500W	6600W	8300W
Max DC power for single MPPT	2000W	2400W	2600W	3000W	3000W	3500W	2*2750W/ 2750W
Number of independent MPPT	2						
Number of DC inputs	1/1						2/1
Max. Input voltage	600V						
Start-up input voltage	120V						
Rated input voltage	360V						
MPPT voltage range	90-580V						
Full load DC voltage range	160V-520V	180V-520V	200V-520V	230V-520V	250V-520V	300V-520V	250V-520V
Max. Input current per MPPT	11A/11A						22A/11A
Maximum DC input short circuit current per MPPT	14A						28/14A

Output (AC)

Rated power	3000W	3680W	4000W	4600W	5000W	6000W	7500W
Max. AC power	3000VA	3680VA	4000VA	4600VA	5000VA	6000VA	7500VA
Max. Output current	13.7A	16.8A	18.2A	21A	22.8A	27.3A	32.6A
Nominal grid voltage	L/N/PE, 220Vac, 230Vac, 240Vac						
Grid voltage range	180Vac-276Vac (According to local standard)						
Nominal frequency	50Hz/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)						
Power limit export	Zero export or adjustable power limit export						

Performance

Max efficiency	98.0%	98.2%
European weighted efficiency	97.5%	97.6%
Self-consumption at night	< 1W	
Feed-in start power	50W	
MPPT efficiency	> 99.9%	

Protection

DC reverse polarity protection	Yes
DC switch	Optional
Protection class/overvoltage category	I/III
Input/output MOV (II)	Yes
Safety protection	Anti islanding, RCMU, Ground fault monitoring
SPD	MOV: Type III standard/ Type II optional

Communication

Power management unit	According to certification and request
Standard communication mode	Rs485, Wifi/Ethernet/GPRS(optional), SD card(optional)
Operation data storage	25 years

General Data

Ambient temperature range	-25°C~ +60°C	-30°C~ +60°C
Topology	Transformerless	
Degree of protection	IP65	
Allowable relative humidity range	0~100%	
Max. Operating altitude	2000m	
Noise	<25dB	
Weight	11.5kg	18kg
Cooling	Natural convection	
Dimension	405*315*135mm	467*352*157mm
Display	LCD display	
Warranty	5 years/ 7 years/ 10 years	

Standard







EMC	EN 61000-6-2, EN 61000-6-3, EN 61000-3-2, EN 61000-3-3, 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, CEI 0-21, EN50438/EN50549, G83/G59/G98/G99, NB/T32004; ABNT NBR 16149/16150 (for SOFAR3KTLM-G2, SOFAR5KTLM-G2& 7.5KTLM)



SOFAR 4.4k~12kTL-X

4400/5500/6600/8800/11000/12000

Three-Phase Dual-MPPT

-  Internal DC switch
-  98.3% Max. efficiency up to 98.3%
-  4" Super large 4-inch LCD
-  Smart monitoring, RS485, Wifi/Ethernet/GPRS (optional)
-  1.1 1.1 times continuous output overload, 45 ° C full load output
-  Built-in SPD, over / under pressure, over current, over temperature, island and other multiple protection



Datasheet	SOFAR 4.4KTL-X	SOFAR 5.5KTL-X	SOFAR 6.6KTL-X	SOFAR 8.8KTL-X	SOFAR 11KTL-X	SOFAR 12KTL-X
Input (DC)						
Recommended PV input power	4800W	6000W	7200W	9600W	12000W	14400W
Max DC power for single MPPT	4500W	5700W	6250W	6200W	6200W	6850W
Number of independent MPPT	2					
Number of DC inputs	1 for each MPPT					
Max. Input voltage	1000V					
Start-up input voltage	180V					
Rated input voltage	600V					
MPPT voltage range	160-960V					
Full load DC voltage range	190V-850V	240V-850V	290V-850V	380V-850V	480V-850V	575V-850V
Max. Input current per MPPT	11A/11A					
Maximun DC input short circuit current per MPPT	14A					
Output (AC)						
Rated power	4400W	5500W	6600W	8800W	11000W	12000W
Max. AC power	4400VA	5500VA	6600VA	8800VA	11000VA	13200VA
Max. Output current	6.4A	8.0A	9.6A	12.8A	15.9A	19.1A
Nominal grid voltage	3/N/PE, 220/380Vac, 230/400Vac, 240/415Vac					
Grid voltage range	310Vac-480Vac (According to local standard)					
Nominal frequency	50Hz/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)					
Power limit export	Zero export or adjustable power limit export					
Performance						
Max efficiency	98.0%	98.0%	98.0%	98.3%	98.3%	98.3%
European weighted efficiency	97.5%	97.5%	97.5%	98.0%	98.0%	98.0%
Self-consumption at night	<1W					
MPPT efficiency	>99.9%					
Protection						
DC reverse polarity protection	Yes					
DC switch	Yes					
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°C~+60°C					
Topology	Transformerless					
Degree of protection	IP65					
Allowable relative humidity range	0~100%					
Max. Operating altitude	2000m					
Noise	<29dB					
Weight	21kg	21kg	21kg	22kg	22kg	22kg
Cooling	Natural					
Dimension	457*452*202mm					
Display	LCD display					
Warranty	5 years/ 7 years/ 10 years					
Standard						
EMC	EN 61000-6-1, EN 61000-6-2, EN 61000-6-3, EN 61000-6-4, EN 61000-3-2, EN 61000-3-3, EN 61000-3-12, EN 61000-3-11					
Safety standards	IEC62109-1/2, IEC62116, IEC61727, IEC-61683, IEC60068(1,2,14,30), IEC60255					
Grid standards	AS/NZS 4777, VDE V 0124-100, V 0126-1-1, VDE-AR-N 4105, CEI 0-21, EN50438/EN50549, G83/G59, Rd1699, UTE C15-712-1, EN50530, NB/T32004					



SOFAR 10k~15kTL-G2

10000 / 12000 / 15000

Three-Phase

Dual-MPPT



Fuse free design



Max. efficiency up to 98.3%



Built-in zero export function



Outdoor IP65 protection level



I-V curve scanning function



Smart control and flexible configuration



Datasheet

SOFAR I1000TL-G2

SOFAR I2000TL-G2

SOFAR I5000TL-G2

Input (DC)

Max. PV input power	18000W	18000W	18000W
Max DC power for single MPPT	11000W/7500W	11000W/7500W	11000W/7500W
Number for independent MPPT		2	
Number for DC inputs		3	
Max. input voltage		1000V	
Start-up input voltage		180V	
Rated input voltage		600V	
MPPT voltage range		160V-960V	
Full load DC voltage range	350V-850V	500V-850V	500V-850V
Max. input MPPT current		21A/11A	
Maximun DC input short circuit current per MPPT		30A/15A	

Output (AC)

Rated power	11000W	13200W	16500W
Max. AC power	11000VA	13200VA	16500VA
Max. Output current	3*16.5A	3*20A	3*24A
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		1 default (+/-0.8 adjustable)	

Performance

Max efficiency		98.3%	
European weighted efficiency		98.0%	
Self-consumption at night		<1W	
MPPT efficiency		>99.9%	

Protection

DC reverse polarity protection		Yes	
DC switch		Yes	
ARPC		Anti reverse power controller (optional)	
Safety protection		Anti islanding, RCMU, Ground fault monitoring	

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°C~+60°C	
Topology		Transformer-less	
Degree of protection		IP65	
Allowable relative humidity range		0~100%	
Max. Operating altitude		2000m	
Noise		<45dB	
Weight	23.5kg	23.5kg	25kg
Cooling		Fan	
Dimension		539*452*202mm	
Display		LCD display	
Warranty		5 years/ 7 years/ 10 years	

Standard

EMC		EN 61000-6-1, EN 61000-6-3	
Safety standards		IEC62109-1/2, IEC62116, IEC61727, IEC-61683, IEC60068(1,2,14,30)	
Grid standards		AS/NZS 4777, VDE-AR-N 4105, CEI 0-21, EN50438/EN50549, V 0126-1-1, NB/T32004	



SOFAR 10k~20kTL

10000/15000/17000/20000

Three-Phase Dual-MPPT

4"

Super large 4-inch LCD

98.2%

Max. efficiency up to 98.2%

0

Built-in zero export function



Smart monitoring, RS485, Wifi/Ethernet/GPRS (optional)



I-V curve scanning function



Built-in SPD, over / under pressure, over current, over temperature, island and other multiple protection



Datasheet	SOFAR 10000TL	SOFAR 15000TL	SOFAR 17000TL	SOFAR 20000TL
Input (DC)				
Recommended PV input power	11000W	16500W	18700W	22000W
Max DC power for single MPPT	6750W	10500W	10500W	12000W
Number for independent MPPT	2			
Number for DC inputs	2 for each MPPT			
Max. input voltage	1000V			
Start-up input voltage	250V			
Rated input voltage	600V			
MPPT voltage range	250V-960V			
Full load DC voltage range	350V-850V	370V-850V	420V-850V	430V-850V
Max. input current per MPPT	15A/15A	21A/21A	21A/21A	24A/24A
Maximum DC input short circuit current per MPPT	20A	27A	27A	30A
Output (AC)				
Rated power	10000W	15000W	17000W	20000W
Max. AC power	10000VA	15000VA	17000VA	20000VA
Max. Output current	15A	22A	25A	29A
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	1 default (+/-0.8 adjustable)			
Performance				
Max efficiency	98.2%	98.2%	98.2%	98.2%
European weighted efficiency	97.6%	97.9%	97.9%	98.0%
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°C ~ +60°C			
Topology	Transformer-less			
Degree of protection	IP65			
Allowable relative humidity range	0~100%			
Max. operating altitude	2000m			
Noise	<45dB			
Weight	45kg	45kg	48kg	48kg
Cooling	Natural			
Dimension	709*492*246mm			
Display	LCD display			
Warranty	5 years/ 7 years/ 10 years			
Standard				
EMC	EN 61000-6-1, EN 61000-6-2, EN 61000-6-3, EN 61000-6-4, EN 61000-3-2, EN 61000-3-3, EN 61000-3-12, EN 61000-3-11			
Safety standards	IEC62109-1/2, IEC62116, IEC61727, IEC-61683, IEC60068(1,2,14,30), IEC60255			
Grid standards	AS/NZS 4777, VDE V 0124-100, V 0126-1-1, VDE-AR-N 4105, CEI 0-21/CEI 0-16, EN50438/EN50549, G83/G59, C10/11, Rd1699, UTE C15-712-1, EN50530			



SOFAR 20k~33kTL-G2

20000/ 25000/ 30000/ 33000

Three-Phase Dual-MPPT

4"

Super large 4-inch LCD

1100v

1100V voltage level design

0

Built-in zero export function

98.6%

Max. efficiency up to 98.6%

I-V

I-V curve scanning function

⊞

Built-in SPD, over / under pressure, over current, over temperature, island and other multiple protection



Datasheet

SOFAR
20000TL-G2

SOFAR
25000TL-G2

SOFAR
30000TL-G2

SOFAR
33000TL-G2

Input (DC)

Recommended PV input power	26000W	32500W	39000W	42900W
Max DC power for single MPPT	13000W	16000W	18000W	20000W
Number for independent MPPT	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 input voltage	250V			
Rated input voltage	620V			
MPPT voltage range	230V-960V			
Full load DC 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	1 default (+/-0.8 adjustable)			

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°C ~ +60°C			
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	5 years/ 7 years/ 10 years			

Standard

EMC	EN 61000-6-2, EN 61000-6-3, EN 61000-3-12, EN 61000-3-11			
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, EN50438/EN50549, G59, P.O. 12.3, RD1699, UTE C15-712-1, EN50530, NB/T32004			



SOFAR 30k~40kTL

30000/ 33000/ 36000/ 40000



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	SOFAR 40000TL
Input (DC)				
Recommended PV input power	30720W	34000W	40800W	40800W
Max DC power for single MPPT	15360W	17000W	20400W	20400W
Number for independent MPPT	2			
Number for DC inputs	4 for each MPPT			
Max. input voltage	1000V			
Start-up input voltage	250V			
Rated input voltage	600V	600V	600V	700V
MPPT voltage range	250V-960V			
Full load DC voltage range	480V-800V	480V-800V	500V-800V	570V-800V
Max. input MPPT current	32A/32A	35A/35A	38A/38A	35A/35A
Max. input current per string	12A			
Maximum DC input short circuit current per MPPT	40A	44A	47.5A	44A
Output (AC)				
Rated power	30000W	33000W	36000W	40000W
Max. AC power	30000VA	33000VA	36000VA	40000VA
Max. Output current	43A	48A	54A	48A
Nominal grid voltage	3/N/PE, 220/380Vac, 230/400Vac, 240/415Vac			3/N/PE or 3/PE, 277/480Vac
Grid voltage range	310Vac-480Vac (According to local standard)		422Vac-528Vac(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	1 default (+/-0.8 adjustable)			
Performance				
Max efficiency	98.5%	98.5%	98.5%	98.7%
European weighted efficiency	98.2%	98.2%	98.2%	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			
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°C ~ +60°C			
Topology	Transformer-less			
Degree of protection	IP65			
Allowable relative humidity range	0~100%			
Max. operating altitude	2000m			
Noise	<30dB	<45dB	<45dB	<45dB
Weight	50kg			
Cooling	Natural	Fan	Fan	Fan
Dimension	774*564*298mm			
Display	LCD display			
Warranty	5 years/ 7 years/ 10 years			
Standard				
EMC	EN 61000-6-2, EN 61000-6-3, 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, AS/NZS 61000, VDE V 0124-100, V 0126-1-1, VDE-AR-N 4105, CEI 0-21/CEI 0-16, EN50438/EN50549, G59, Rd1699, UTE C15-712-1, EN50530			



SOFAR 50k~70kTL

50000/ 60000/ 70000



Three-Phase

Three-MPPT



Super large 4-inch LCD



Fuse free design



Outdoor IP65 protection level



Built-in zero export function



Sound and light alarm function



Max. efficiency up to 98.6%



DC SPD Class 2, over/under voltage, over current, over temperature, island and other multiple protection



Datasheet

SOFAR 50000TL

SOFAR 60000TL

SOFAR 70000TL-HV

Input (DC)

Recommended PV input power	55000W	66000W	77000W
Max DC power for single MPPT	22000W	22000W	26000W
	16000W	22000W	26000W
	16000W	22000W	26000W
Number for independent MPPT		3	
Number for DC inputs	4/3/3	4/4/4	4/4/4
Max. input voltage		1000V	
Start-up input voltage		250V	
Rated input voltage	600V	600V	700V
MPPT voltage range		250V-960V	
Full load DC voltage range	530V-800V	530V-800V	660V-800V
Max. input MPPT current	40A/30A/30A	40A/40A/40A	40A/40A/40A
Max. input current per string		12A	
Maximum DC input short circuit current per MPPT	48A/36A/36A	48A	48A

Output (AC)

Rated power	50000W	60000W	70000W
Max. AC power	50000VA	60000VA	70000VA
Max. Output current	80A	90A	90A
Nominal grid voltage	3/N/PE, 220/380Vac, 230/400Vac, 240/415Vac		3/N/PE or 3/PE, 277/480Vac
Grid voltage range	310Vac-480Vac (According to local standard)		422Vac-528Vac (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		1 default (+/-0.8 adjustable)	

Performance

Max efficiency	98.5%	98.6%	98.6%
European weighted efficiency	98.3%	98.4%	98.4%
Self-consumption at night		< 1W	
MPPT efficiency			

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	70kg
Cooling		Fan	
Dimension		713*737*297mm	
Display		LCD display	
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 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, EN50438/EN50549, G59, EN50530, NB/T32004	