



SOFAR **1k~3.3kTL-G3**

1100/ 1600/ 2200/ 2700/ 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

0

Built-in zero export function



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

Datasheet	SOFAR 1100TL-G3	SOFAR 1600TL-G3	SOFAR 2200TL-G3	SOFAR 2700TL-G3	SOFAR 3300TL-G3
Input (DC)					
Recommended Max. PV input power	1500W	2200W	3000W	3700W	4500W
Max. Input voltage	500V	500V	500V	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
Full load DC voltage range	110-450V	150-450V	200-450V	250-500V	300-500V
Max. Input vurrent MPPT			12A		
Maximun 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	3300W
Max. AC power	1100VA	1600VA	2200VA	2700VA	3300VA
Rated Output current	4.8A	7A	9.6A	11.8A	13A
Max. Output current	5.3A	7.7A	10.6A	13A	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	1default (adjustable+/-0.8)				
Efficiency					
Max. Efficiency	97.5%	97.5%	97.5%	97.7%	97.7%
European weighted efficiency	96.9%	96.9%	96.9%	97.2%	97.2%
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 Date					
Topology	Transformerless				
Ambient temperature range	-30℃~+60℃				
Allowable relative humidity range	0~100%				
Noise	<25dB				
DC switch	optional				
Cooling	Natural convection				
Max. Operating altitude	2000m				
Dimension	297*260*118mm	297*260*118mm	297*260*118mm	315*260*118mm	315*260*118mm
Support bracket	Wall-mounted				
Weight	5.5kg	5.5kg	5.5kg	6.3kg	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 Max. 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	1default (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 Date					
Topology	Transformerless				
Ambient temperature range	-30℃~+60℃				
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



I-V curve scanning function



IP65 ingress protection

4"

Super large 4-inch LCD



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

Datasheet	SOFAR 3000TLM	SOFAR 3680TLM	SOFAR 4000TLM	SOFAR 4600TLM	SOFAR 5000TLM	SOFAR 6000TLM
Input (DC)						
Recommended Max. 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	1default (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 Date						
Ambient temperature range	-25℃~+60℃					
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 |  2 MPPT high precision string detection |
|  IP65 ingress protection |  I-V curve scanning function |
|  Max. efficiency up to 98.2% |  Built-in sound and light alarm function |
|  Smart monitoring, RS485, Wifi/Ethernet/GPRS (optional) | |

Datasheet	SOFAR 3KTLM-G2	SOFAR 3.6KTLM-G2	SOFAR 4KTLM-G2	SOFAR 4.6KTLM-G2	SOFAR 5KTLM-G2	SOFAR 6KTLM-G2	SOFAR 7.5KTLM
Input (DC)							
Recommended Max. 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	
Maximun 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 Date							
Ambient temperature range				-25℃~+60℃		-30℃~+60℃	
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 **3.3k~12kTL-X**

3300/4400/5000/5500/6600/8800/11000/12000



Three-Phase Dual-MPPT



Internal DC switch

98.3%

Max. efficiency up to 98.3%



Super large 4-inch LCD



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



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 3.3KTL-X	SOFAR 4.4KTL-X	SOFAR 5KTL-X (Australia)	SOFAR 5.5KTL-X	SOFAR 6.6KTL-X	SOFAR 8.8KTL-X	SOFAR 11KTL-X	SOFAR 12KTL-X
Input (DC)								
Recommended Max. PV input power	3600W	4800W	6000W	6000W	7200W	9600W	12000W	14400W
Max DC power for single MPPT	3550W	4500W	5700W	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	160V-850V	190V-850V	240V-850V	240V-850V	290V-850V	380V-850V	480V-850V	575V-850V
Max. Input current per MPPT	11A/11A							
Maxnimun DC input short circuit current per MPPT	14A							
Output (AC)								
Rated power	3000W	4000W	5000W	5000W	6000W	8000W	10000W	12000W
Max. AC power	3300VA	4400VA	5000VA	5500VA	6600VA	8800VA	11000VA	13200VA
Max. Output current	4.8A	6.4A	8.0A	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%	98.0%	98.0%	98.3%	98.3%	98.3%
European weighted efficiency	97.5%	97.5%	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 Date								
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	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

98.3%

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 I 1000TL-G2	SOFAR I 2000TL-G2	SOFAR I 5000TL-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℃~+60℃	
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 Max. 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
Maximun 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℃~+60℃			
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

SPD

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 Max. 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℃~+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	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 Max. 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			
Maxnimun 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℃~+60℃			
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

4"

Super large 4-inch LCD



Outdoor IP65 protection level



Sound and light alarm function



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



Fuse free design

0

Built-in zero export function

98.6%

Max. efficiency up to 98.6%

Datasheet	SOFAR 50000TL	SOFAR 60000TL	SOFAR 70000TL-HV
Input (DC)			
Recommended Max. 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 pet string	12A		
Maxnimun 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℃~+60℃		
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		



ME 3000SP

3KW AC

Coupled energy storage inverter

-  Avariety of work modes are optional
-  Outdoor IP65 design
-  Compatible with other brands of inverter
-  Integrated fanless self-recognition heat dissipation design
-  LCD + LED – human friendly-machine interface
-  Smart battery energy management system
-  Flexible configuration of lead acid or lithium battery

Datasheet

ME 3000SP

Battery Parameters

Battery Type	Lithium-ion, Lead-acid
Nominal battery voltage	48V
Battery voltage range	42-58V
Recommended battery capacity	200Ah (100~500Ah optional)
Recommended storage capacity	9.6kWh
Max. Charging current	65A
Charging current range	0-65A (Programmable)
Charging curve	3-Stage adaptive with maintenance
Max. Discharging current	70A
Electronic protection	OCP OTP OVP
Short circuit protection	Fuse (100A)
Discharge times (Hour)	Po=1kVA9.6h
	Po=3kVA3.2h
Depth of discharge	Lithium-ion: 0-80% DOD adjustable
	Lead-acid: 0-50% DOD adjustable

AC Parameters

Max. Output power	3kVA
Rated Input/ Output voltage	230V
Max. Input/ Output current	13A
AC Input/ Voltage range	180V-270V
Grid frequency range	44~55Hz / 54~66Hz
THD	<3%
Power factor	1 default (+/-0.8 adjustable)
Connection phase	Single
Current (inrush)	0.8A/ 1us
Maximum output fault current	100A/ 1us
Maximum output over current protection	13A

System Parameters

Max. Charging efficiency	>95%
Max. Discharging efficiency	>95%
Standby losses	<5W
Topology	High frequency isolated transformer
Degree of protection	IP65
Safety protection	Anti islanding, RCMU, Ground fault monitoring
Communication	RS485, Wifi/Ethernet/GPRS, CAN2.0

Environmental

Ambient temperature range	-25°C~ +60°C (Above 45°C Derating)
Allowable relative humidity range	0~100%
Protective class	Class I
Max. Operating altitude	2000m
Current sensor connection	External

Emergency Power Supply

EPS rated power	3000VA
EPS rated voltage, Frequency	230V, 50/60Hz
EPS rated current	13A
Total harmonic distortion	<3%
Switch time	<3s

General Data

Noise	<25dB
Weight	16kg
Cooling	Natural
Dimension (W*H*D)	530*360*173mm
Display	LCD
Warranty	5 Years (Optional: Extension to 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
Safety standards	IEC62109-1/2, IEC62040-1
Grid standards	AS/NZS 4777, AS/NZS 62040, VDE V 0124-100, V 0126-1-1, VDE-AR-N 4105, CEI 0-21, EN50438/EN50549, G83/G98, UTE C15-712-1



HYD

3k~6k-ES

3000/3600/4000/5000/6000

Single-Phase Energy storage integrated inverter



Outdoor IP65 design



A variety of work modes are optional



Built-in zero export function



Integrated fanless self-recognition heat dissipation design



Compatible with the two functions of the grid



EPS function, switching time is less than 10ms



Flexible configuration of lead acid or lithium battery

Datasheet	HYD 3000-ES	HYD 3600-ES	HYD 4000-ES	HYD 5000-ES	HYD 6000-ES
Battery Parameters					
Battery Type	Lithium-ion, Lead-acid				
Nominal battery voltage	48V				
Battery voltage range	42-58V				
Battery Capacity	50-2000Ah				
Maximum Charging / Discharging Power	3000W				
Maximum Charging Current	65A (Programmable)				
Maximum Discharging Current	70A (Programmable)				
Charging curve(Lithium-ion)	BMS				
Charging curve(Lead-acid)	3-Stage adaptive with maintenance				
Depth of discharge	Lithium-ion: 0-90% DOD adjustable, Lead-acid:0-50% DOD adjustable				
Input DC(PV side)					
Recommended Max. PV input power	3500W	4000W	4400W	5500W	6600W
Max DC power for single MPPT	2000W	2400W	2600W	3000W	3500W
The max DC input voltage	600V				
Start-up DC voltage	120V				
Nominal DC Voltage	360V				
MPPT operating voltage range	90-580V				
Full load DC voltage range	160V-520V	180V-520V	200V-520V	250V-520V	300V-520V
MPPT number	2				
The max DC input current	12A/12A				
The max DC input short current	15A/15A				
Output AC(Grid side)					
Rated Power	3000W	3680W	4000W	5000W	6000W
Max. Output Power	3000VA	3680VA	4000VA	5000VA	6000VA
Nominal Grid Voltage	L/N/PE, 220, 230, 240				
Operation phase	Single (L-N-PE)				
Max. Input / Output current	13.7A	16A	18.2A	22.8A	27.3A
AC voltage Range	180V~276V (According to local standard)				
Grid Frequency range	44-55Hz/54-66Hz (According to local standard)				
THD	< 3%				
Power factor	1 default (+/-0.8 adjustable)				
Output AC(Emergency Power Supply)					
EPS rated power	3000VA				
Operation phase	Single (L-N-PE)				
EPS rated voltage,Frequency	230V, 50/60Hz				
EPS rated current	13A				
Peak Output Apparent Power	4000VA, 10s				
THD	180-276Vac (According to local standard)				
Switch time	10ms default				
Efficiency					
MPPT efficiency	99.9%				
Max efficiency of solar Inverter	97.6%	97.6%	97.6%	97.8%	98.0%
European efficiency of solar Inverter	97.2%	97.2%	97.2%	97.3%	97.5%
Max. Charging efficiency of battery	94.6%				
Max. DisCharging efficiency of battery	94.6%				
Protection					
PV reverse polarity protection	Yes				
PV insulation detection	Yes				
Ground fault monitoring	Yes				
Over current protection	Yes				
Over voltage protection	Yes				
Battery soft start protection	Yes				
General Date					
Ambient temperature range	-30℃~-+60℃ (Above 45℃ Derating)				
Standby Losses	<5W				
Topology	High frequency insulation (for bat)				
DC-Switch	Yes				
Degree Of Protection	IP65				
Allowable Relative Humidity Range	0~100%				
Communication	RS485, Wifi/Ethernet/GPRS, SD, CAN2.0				
Protective class	Class I				
Max. Operating Altitude	2000m				
Current Sensor Connection	External				
Noise	<25dB				
Weight	20.5kg				
Cooling	Natural				
Dimension (W*H*D)	566*394*173 mm				
Display	LCD display				
Warranty	5 Years or more				
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, IEC62040-1, 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, UTE C15-712-1, UNE 206 007-1				



HYD

10k~20kTL-3PH

10000 / 15000 / 20000



Three-Phase Energy storage integrated inverter



4 MPPT input, more flexible configuration

APF

APF mode, improved grid power quality



Diversified work patterns and rapid gains

0123
456
789

Full digital control, higher control accuracy



Multiple parallel systems, more flexible system solutions



Off-grid output can be connected to unbalanced load, three-phase separate output is supported

Datasheet	HYD 10000TL-3PH	HYD 15000TL-3PH	HYD 20000TL-3PH
Battery Parameters			
Battery Type	Li-Ion		
Battery Voltage Range	200V-750V		
Rated Charge/Discharge Current	25A	25A	2*25A
Charging strategy	Follow BMS		
Rated Charge/Discharge Power	10000W	15000W	20000W
Max Charge/Discharge Power	12500W<10min 15000W<1min	18750W<10min 22500W<1min	25000W<10min 30000W<1min
DC Connector/Quality	MC PV Connector/2		
PV Input			
Max Input Power	13000W	18000W	26000W
Max Input Voltage	1000V	1000V	1000V
Start-up Voltage	180V	180V	180V
MPPT Voltage Range	160V-960V	160V-960V	160V-960V
Rated Voltage	600V	600V	600V
Full Load Voltage Range	500V-850V	500V-850V	500V-850V
Max Input Current	12.5A/12.5A	25A/25A	25A/25A
Max Short-circuit Current	16.5A/16.5A	32.5A/32.5A	32.5A/32.5A
MPPT Number/ String Number of Each MPPT	2/1	2/2+2	2/2+2
Off-Grid Output			
Rate Output Voltage	230V/400V (+ -10%)		
THDv@ Full Load	3%		
Rate Output Current	3*14.5A	3*21.8A	3*29A
Max Output Current	3*22A<1min	3*33A<1min	3*43.5A<1min
Output Frequency	50/60HZ		
Rated Output Power	1000W	15000W	20000W
Parallel Connection	Yes		
Single Phase Output	Yes		
AC Terminal	5P Terminal Block		
ON-Grid Output			
Rated Output Power	10000W	15000W	20000W
Max Output Power	11000VA	16500VA	22000VA
Max Output Current	3*16.5A	3*25A	3*33A
Output Voltage	230/400V; (184-275V) [According to local standard]		
Output Frequency	50Hz/60Hz		
Output Power Factor	0.8leading- 0.8lagging		
THDi@ Full Load	<3%		
Grid Type	3/N/PE		
Efficiency			
Max Efficiency	98.0%	98.1%	98.1%
Europe Efficiency	97.5%	97.6%	97.6%
MPPT Efficiency	99.9%	99.9%	99.9%
Protection			
Input Anti-Reverse	Yes		
Output Over-current	Yes		
Output Over-voltage	Yes		
Anti-Islanding	Yes		
RCMU	Yes		
Insulation Resistance Monitoring	Yes		
Surge Protection	III		
General Data			
Allowable Relative Humidity Range	0~100%		
Weight	25kg	30kg	35kg
Ambient temperature range	-25℃~+60℃		
Noise	≤45dB(A)		
Max. Operating Altitude	2000m		
Topology	Transformer-less		
Cooling	Nature cooling	Fan	Fan
Degree Of Protection	IP65		
Dimension (W*H*D)Allowable Relative Humidity Range	560*570*230mm		
Warranty	5 Years or more		
Feature			
DC Terminal	MC4		
Display	LCD Graphic		
Monitoring	RS485/WIFI/GPRS/Ethernet		
Battery Communication Port	CAN		
Meter Communication	CAN		
Parallel Connection Communication	CAN+ Sync + Error Diagnosis		
Digital Input	6 digital inputs (5V TTL)		
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, IEC62040-1, 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, UTE C15-712-1, UNE 206 007-1		