



SOFAR **1.1k~3.3kTL-G3**

1100/1600/2200/2700/3000/3300



Single-Phase

Single-MPPT

1.4

1.4 DC overload



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 3000TL-G3	SOFAR 3300TL-G3
Input (DC)						
Recommended Max. PV input power	1500W	2200W	3000W	3700W	4100W	4500W
Max. Input voltage	500V	500V	500V	550V	550V	550V
Start-up voltage	70V					
Rated input voltage	360V					
MPPT operating voltage range	50-500V	50-500V	50-500V	50-550V	50-550V	50-550V
Full power MPPT voltage range	90-450V	110-450V	150-450V	200-500V	250-500V	250-500V
Max. Input current 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	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	1default (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%
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					
General Data						
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[mm]	303*260.5*118	303*260.5*118	303*260.5*118	321*260.5*131.5	321*260.5*131.5	321*260.5*131.5
Support bracket	Wall-mounted					
Weight	5.5kg	5.5kg	5.5kg	6.3kg	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	1470W	2130W	2930W	3600W	3990W
Max. Input voltage	450V	450V	500V	500V	500V
Number of MPPT/ String per MPPT	1/1				
Start-up voltage	100V	100V	120V	120V	120V
Rated input voltage	360V				
MPPT operating voltage range	80-455V	80-455V	100-505V	100-505V	100-550V
Full power MPPT voltage range	105-380V	160-380V	165-450V	205-450V	225-475V
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℃~ +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**



Built-in zero export function



I-V curve scanning function



IP65 ingress protection



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	3990W	4900W	5320W	6120W	6650W	7980W
Max DC power for single MPPT	2000W	2400W	2600W	3000W	3000W	3150W
Number of MPPT trackers	2					
Number of DC inputs	1 for each MPPT					
Max. Input voltage	600V					
Start-up voltage	100V	120V	120V	120V	120V	120V
Rated input voltage	360V					
MPPT operating voltage range	80-580V	100-580V	100-580V	100-580V	100-580V	100-580V
Full power MPPT voltage range	130V-520V	165V-520V	165V-520V	165V-520V	175V-520V	230V-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 Data						
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

0

Built-in zero export function



IP65 ingress protection

98.2%

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-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	3990W	4790W	5320W	6120W	6650W	7980W	9980W
Max DC power for single MPPT	2000W	2400W	2600W	3000W	3000W	3500W	2*2750W/ 2750W
Number of MPPT trackers				2			
Number of DC inputs				1/1	2/1		
Max. Input voltage				600V			
Start-up voltage				120V			
Rated input voltage				360V			
MPPT operating voltage range				90-580V			
Full power MPPT 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		
Maxnimun 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	16A	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						
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℃~+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



Integrated with DC switch

98.3%

Max. efficiency up to 98.3%

4"

Super large 4-inch LCD

DRM

Built-in DRM port and logic



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



Over / under pressure, over current, over temperature, island and other multiple protections

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	4390W	5860W	6650W	7320W	8780W	11710W	14630W	15960W
Max DC power for single MPPT	3550W	4500W	5700W	5700W	6250W	6200W	6200W	6850W
Number of MPPT trackers	2							
Number of DC inputs	1 for each MPPT							
Max. Input voltage	1000V							
Start-up voltage	200V							
Rated input voltage	600V							
MPPT operating voltage range	160-960V							
Full power MPPT voltage range	160V-840V	190V-840V	240V-840V	240V-840V	290V-840V	300V-840V	300V-840V	300V-840V
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 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	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%

DRM

Built-in DRM port and logic



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	I 8000W	I 8000W	I 9950W
Max DC power for single MPPT	I I 000W/7500W	I I 000W/7500W	I I 000W/7500W
Number of MPPT trackers		2	
Number for DC inputs		3	
Max. input voltage		I 000V	
Start-up voltage		200V	
Rated input voltage		600V	
MPPT operating voltage range		I 60V-960V	
Full power MPPT voltage range		300V-840V	
Max. input MPPT current		2 I A/I I A	
Maximun DC input short circuit current per MPPT		30A/I 5A	
Output (AC)			
Rated power	I 0000W	I 2000W	I 5000W
Max. AC power	I I 000VA	I 3200VA	I 6500VA
Max. Output current	3*I 6.5A	3*20A	3*24A
Nominal grid voltage		3/N/PE, 220/380Vac, 230/400Vac, 240/4 I 5Vac	
Grid voltage range		3 I 0Vac-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~I 00%	
THDi		<3%	
Power factor		I default (+/-0.8 adjustable)	
Performance			
Max efficiency		98.3%	
European weighted efficiency		98.0%	
Self-consumption at night		< I W	
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~I 00%	
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/ I 0 years	
Standard			
EMC		EN 6 I 000-6- I, EN 6 I 000-6-3	
Safety standards		IEC62 I 09- I/2, IEC62 I I 6, IEC6 I 727, IEC-6 I 683, IEC60068(I,2,I 4,30)	
Grid standards		AS/NZS 4777, VDE-AR-N 4 I 05, CEI 0-2 I, EN50438/EN50549, V 0 I 26- I - I, 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%

DRM

Built-in DRM port and logic



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 protections

Datasheet	SOFAR 10000TL	SOFAR 15000TL	SOFAR 17000TL	SOFAR 20000TL
Input (DC)				
Recommended Max. PV input power	13300W	19950W	22610W	26600W
Max DC power for single MPPT	6750W	10500W	10500W	12000W
Number of MPPT trackers	2			
Number for DC inputs	2 for each MPPT			
Max. input voltage	1000V			
Start-up voltage	350V			
Rated input voltage	600V			
MPPT operating voltage range	250V-960V			
Full power MPPT voltage range	350V-840V	370V-840V	420V-840V	430V-840V
Max. input current per MPPT	15A/15A	21A/21A	21A/21A	24A/24A
Maxnimun 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

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 pressure, over current, over temperature, island and other multiple protections

Datasheet	SOFAR 20000TL-G2	SOFAR 25000TL-G2	SOFAR 30000TL-G2	SOFAR 33000TL-G2
Input (DC)				
Recommended Max. PV input power	26600W	33250W	39900W	43890W
Max DC power for single MPPT	13000W	16000W	18000W	20000W
Number of MPPT 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	300V			
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	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	39900W	43890W	47880W	53200W
Max DC power for single MPPT	15360W	17000W	20400W	20400W
Number of MPPT trackers	2			
Number for DC inputs	4 for each MPPT			
Max. input voltage	1000V			
Start-up voltage	350V			
Rated input voltage	600V	600V	600V	700V
MPPT operating voltage range	250V-960V			
Full power MPPT voltage range	480V-840V	480V-840V	500V-840V	560V-840V
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 protections



Fuse free design

DRM

Built-in DRM port and logic

98.6%

Max. efficiency up to 98.6%

Datasheet	SOFAR 50000TL	SOFAR 60000TL	SOFAR 70000TL-HV
Input (DC)			
Recommended Max. PV input power	66500W	79800W	93100W
Max DC power for single MPPT	22000W	22000W	26000W
	16000W	22000W	26000W
	16000W	22000W	26000W
Number of MPPT trackers	3		
Number for DC inputs	4/3/3	4/4/4	4/4/4
Max. input voltage	1000V		
Start-up voltage	350V		
Rated input voltage	600V	600V	700V
MPPT operating voltage range	250V-960V		
Full power MPPT voltage range	530V-840V	530V-840V	640V-840V
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	>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℃~+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



LCD + LED – human friendly-machine interface



Outdoor IP65 design



Smart battery energy management system



Compatible with other brands of inverter



Flexible configuration of lead acid or lithium battery



Integrated fanless self-recognition heat dissipation design

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

3000/3600/4000/4600/5000/6000

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 on grid and off 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 4600-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	3990W	4790W	5320W	6120W	6650W	7980W
Max DC power for single MPPT	2000W	2400W	2600W	2800W	3000W	3500W
Max. input voltage	600V					
Start-up voltage	120V					
Nominal DC Voltage	360V					
MPPT operating voltage range	90-580V					
Full power MPPT voltage range	160V-520V	180V-520V	200V-520V	230V-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	4600W	5000W	6000W
Max. Output Power	3000VA	3680VA	4000VA	4600VA	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	21.0A	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%	97.8%	98.0%
European efficiency of solar Inverter	97.2%	97.2%	97.2%	97.3%	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 Data						
Ambient temperature range	-30℃~+60℃ (Above 45℃ Derating)					
Standby Losses	<10W					
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

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

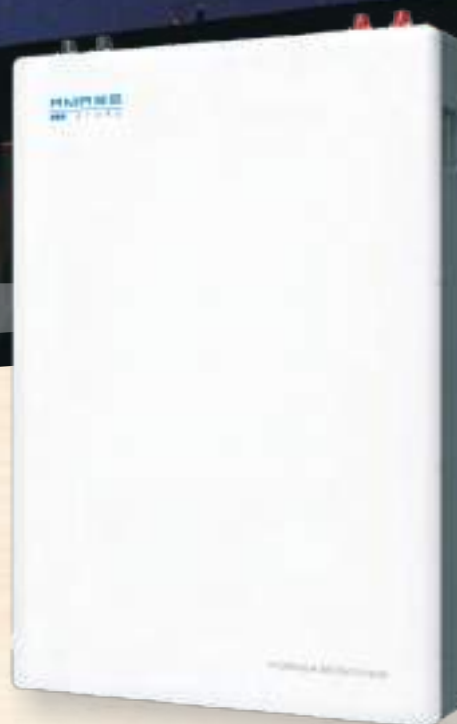


Off-grid output can be connected to unbalanced load, three-phase separate output is supported

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			
Recommended Max. PV input power	13300W	19950W	26600W
Max input voltage	1000V		
Start-up voltage	180V		
MPPT operating voltage range	160V-960V		
Rated voltage	600V		
Full power MPPT voltage range	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	10000W	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	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		

AMASS STORE BATTERY

GTX2000 / E1402-75K9K9



Multi-level energy management, longer battery life



One-button switch machine, more convenient operation



Modular, ultra-thin wall hanging design, convenient installation



Multiple parallel support, high current charge and discharge



High BMS compatibility, perfect match of energy storage inverter



The adoption of high-performance processors, international brand devices, better stability

Datasheet

GTX2000

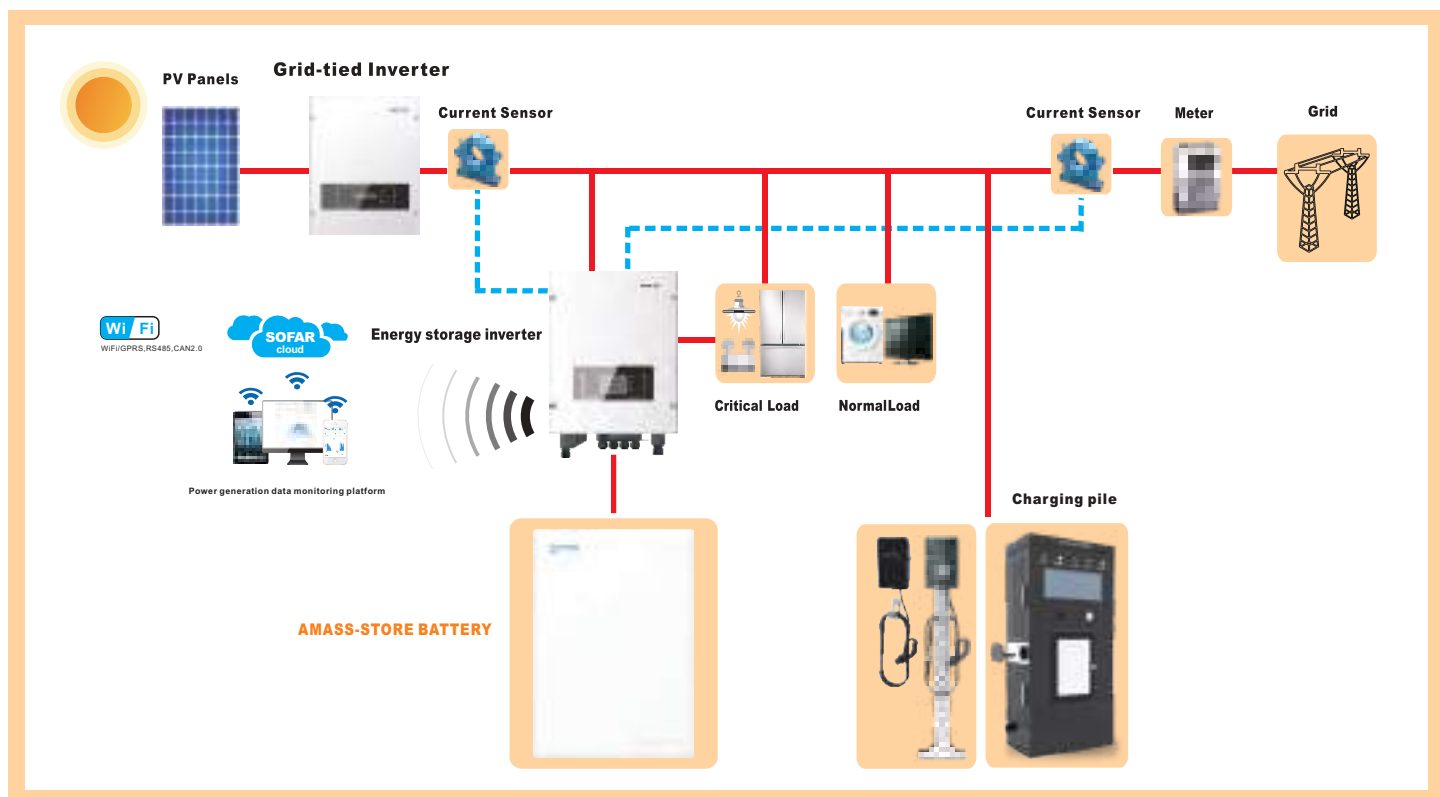
E1402-75K9K9

Basic Parameters

Total energy	2400Wh	2590Wh
Usable energy	2000Wh	2100Wh
Nominal voltage	48.0V	51.8V
Depth of discharge (DOD)	80%	80%
Cycle life (80%DOD)	>6000, 25°C	>4000, 25°C
Design life	10+ Years(25 °C 77°F)	10+ Years(25 °C 77°F)
Discharge voltage	45V ~ 54.0V	45V ~ 58.1V
Charge voltage	51.5V ~ 54.0V	57.5V ~ 58.1V
Cont. Charge current	25A	25A
Max. Charge current	25A	35A
Cont. Discharge current	50A	50A
Max. Discharge current	65A	65A
Communication port	CANbus 2.0B+RS485	CANbus 2.0B+RS485
Storage temperature	5°C~+45°C	0°C~+45°C
Altitude	<4000m	<4000m
Humidity	10%~90%	10%~90%
Scalable	Up to 4 units	Up to 4 units
Installation method	Wall-mounted	Wall-mounted
Protection rating	IP20	IP20
Operating temperature	-10°C~+50°C (discharge) 0°C~+50°C (charge)	-20°C~+60°C (discharge) 0°C~+60°C (charge)
Weight	31kg	30kg
Dimension	95mm*450mm*640mm	95mm*450mm*640mm
Certificates	CE / IEC62619 / RCM / SAA	CE / IEC62619 / RCM / SAA

GTX2000 / E1402-75K9K9_EN_201910_V1

AC Coupled Solar System





Inverter Logger

GPRS / WCDMA



- ▶ Ensure completeness of collected data
- ▶ Realtime alerts with immediate notification for fast troubleshooting
- ▶ Industrial-level SIM chip integrated for stable operation and high performance
- ▶ Suitable for rural areas where no network connection is available
- ▶ High network coverage around the world
- ▶ Devices could be upgraded and debugged remotely for easy maintenance
- ▶ Quick installation and easy operation with “Plug & Play” function
- ▶ Check the system status anytime and anywhere via online portal or app, no additional software required

Datasheet

LIG-1

General

Max. number of inverters	Basic ver.: 1
	Advanced ver.: 1-4
	Professional ver.: 1-10
	*For inverters with RS232,
	each data logger can only Support one inverter at a time

Inverter communication	RS485/422/232(Optional)
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Remote communication	GSM
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Electrical

Communication rate	1200-57600bps (Adjustable)
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Frequency	850/1900/1800/1900MHz
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Wireless communication range	
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Transmitting power	3W (Max) / 1W (Min)
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Data collection intervals	5 minutes (Default) / 1-15 minutes (Optional)
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Preference setting	Serial port AT instruction
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Data access	485/422 Remote server
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Status display	4 LEDs
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Memory	2M Flash(Default) / 512k-16M BYTE Flash(Optional)
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Input voltage	DC 5.0V(+/-5%)
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Static power consumption	<3W
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Max. instantaneous power consumption	3W
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Operating temperature	-25°C ~ +65°C
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Operating humidity	10%-90% Relative humidity, no condensation
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Status display	4 LEDs
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Storage temperature	-25°C ~ +65°C
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Storage humidity	<40%
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Protection class	IP21
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Physical

Dimension	110*80*24mm
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Weight	102g
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Installation	Wall mounted or flatwise
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Stick Logger

GPRS / WIFI / 4G / ETHERNET / NB-IOT



- ▶ External light indicator, logging status at a glance
- ▶ External design, easier to replace faulty equipment
- ▶ IP65 water-proof design, resistant to bad weather, enhance stability
- ▶ Plug and play, pick power within inverter, no external power needed, easy to install
- ▶ Independent from inverter to protect parts inside inverter, eliminate potential problems
- ▶ End-user can monitor yields at any time with SOLARMAN APP



Datasheet	LSG-3	LSG-4	LSW-3	LS4G-3	LSE-3
Remote communication interface	GPRS	GPRS	WiFi	4G	LAN
Working frequency	GSM850/EGSM900 /DCS1800/ PCS1900MHz	GSM850/EGSM900 /DCS1800/ PCS1900MHz	2.142GHz~ 2.484GHz	704~960MHz 1710~2690MHz	Adaptive Network 10M / 100M
Satellite positioning	-	GPS / Beidou < 15m	-	-	-
Antenna	External GPRS Stick Antenna	External GPRS Stick Antenna	External WiFi Stick Antenna	External 4G Stick Antenna	- -
Data interface	RS232				
Working voltage	DC4.7V ~ DC15V				
Working power	3W	3W	1.5W	5W	1W
SIM card	Chip card/MicroSIM	Chip card/MicroSIM	-	MicroSIM	-
Mermory	2M Flash (2M-16M Optional)				
Working temperature	-40°C ~ +85°C				
Working humidity	< 90% (No Condensing)				
No. of connections	One				
Serial communication rate	bps (1200-115200bps Configurable)				
Data acquisition interval	Default 5min (1-15min Configurable)				
Use configuration	AT + Instruction Set Remote server				
	Bluetooth	APP/Web	APP/Web	Local serial port	Web
Firmware upgrade	Remote Upgrade				
Others	Real-time Control, Data resuming				

Pro Logger

GPRS / WIFI / 4G / ETHERNET



- ▶ Multi-interfaces: RS485, RS232, RS422, CAN; supports connection of P1 meter;
- ▶ Support magnetic latching relay controlling 250VAC/16A circuit externally;
- ▶ Standard accessory: 8GB TF card; supports 20-year storage; data in Solarman platform will be saved permanently;
- ▶ Support multi-channel digital/analog input interface; support grid dispatching, sensor and multi-scenarios;
- ▶ SOLARMAN Pro version supports intelligent plant management.
- ▶ Dual SIM chips, supporting on-grid project that requires private network power supply;
- ▶ Support static page configuration or upgrade, local/remote multi-mode monitoring;
- ▶ Support importing data and error history via USB;
- ▶ Embedded super capacitor supports power-off reminder; Simplify plant O&M significantly;

Datasheet

LP-1

LP-2

Wireless Parameters

Remote Communication 1

GPRS

4G

Frequency

GSM850/EGSM900/
DCS1800/PCS1900MHz

LTE-FDD/LTE-TDD/WCDMA/
TD-SCDMA/CDMA/GSM

Remote Communication 2

GPRS / 4G

Remote Communication 3

-

WiFi

Antenna

Sucker Antenna

Hardware Parameters

Ethernet

Adaptive Network: 10 / 100M

Input Voltage

DC 15V~60V

Working Power

< 10W

Output Voltage

DC 12V 500mA

Indicator Light

LED x4

Memory

128MByte NAND FLASH

8GB TF Card (Optional)

8GB TF Card (Standard)

Analog / Digital Input

Analog Input x6 /
Digital Input x6

Analog Input x4 /
Digital Input x4

Digital Output

16A 250VAC Magnetic Latching Relay Output x2

USB

Mini USB x1

USB x1

S0 in

NA

2

Clock

Chip Internal Clock

RS 485

4

4

RS 232

1

1

CAN

1

1

PI

-

1

Power off Reminder

X

√

Operating Temperature

-20°C ~ +60°C

Operating Humidity

10-95% (No Condensing)

Dimension

240*118*49mm

IP Grade

IP20

Installation Method

35mm Din-Rail Mount

Software Parameters

No. of Connections

1-100

Data Acquisition Interval

Default: 5mins (1-15 mins Configurable)

User Configuration

AT + Instruction Set, Remote Server

Firmware Upgrade

SMS / Remote / Local

Others

Real-time Control, Data Resuming Transfer