



SOFAR 1.1K~3.3KTL-G3

1100/1600/2200/2700/3000/3300



Single-Phase

Single-MPPT

1.4

I.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	1500Wp	2200Wp	3000Wp	3700Wp	4100Wp	4500Wp
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	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				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%
Self-consumption at night				<1W		
MPPT 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
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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[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 61000-6-3, EN 61000-3-2, EN 61000-3-3
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, G83/2, C10/11, RD 1699



SOFAR 3K~6KTLM-G3

3000/3600/4000/4600/5000/6000

Single-Phase Dual-MPPT

- 0** Built-in zero export function
- AFCI** Optional AFCI function
- Hand** Compact design, light in weight
- Wave** Natural cooling, no fans, low noise
- 98.4%** Max. efficiency up to 98.4%
- 2 MPPT** Two MPP trackers with 1.5*DC overload
- Wi-Fi** Smart monitoring, remote firmware upgrade

Datasheet

**SOFAR
3KTLM-G3****SOFAR
3.6KTLM-G3****SOFAR
4KTLM-G3****SOFAR
4.6KTLM-G3****SOFAR
5KTLM-G3****SOFAR
5KTLM-G3-A****SOFAR
6KTLM-G3**

Input (DC)

Recommended Max. PV input power	4500Wp	5400Wp	6000Wp	7000Wp	7500Wp	7500Wp	9000Wp
Max DC power for single MPPT	3500W	3500W	3500W	3500W	3750W	3750W	4500W
Number of MPP trackers	2						
Number of DC inputs	1 for each MPPT						
Max. Input voltage	600V						
Start-up voltage	90V						
Rated input voltage	380V						
MPPT operating voltage range	80V-550V						
Full power MPPT voltage range	200V-500V	200V-500V	200V-500V	200V-500V	210V-500V	210V-500V	260V-500V
Max. Input MPPT current	15A/15A						
Max. input short circuit current per MPPT	22.5A/22.5A						

Output (AC)

Rated power	3000W	3680W	4000W	4600W	5000W	5000W	6000W
Max. AC power	3300VA	3680VA	4400VA	4600VA	5500VA	5000VA	6000VA
Nominal output current	13.6A	16A	18.2A	21A	22.7A	21.7A	27.3A
Max. Output current	15A	16A	20A	23A	25A	21.7A	29A
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)						

Performance

Max efficiency	98.2%	98.2%	98.2%	98.4%	98.4%	98.4%	98.4%
European efficiency	97.3%	97.3%	97.3%	97.5%	97.5%	97.5%	97.5%

Protection

DC reverse polarity protection	Yes						
DC switch	Optional						
AFCI protection	Optional						
Protection class/overvoltage category	I/III						
Safety protection	Anti islanding, RCMU, Ground fault monitoring						
SPD	MOV: Type III standard						

Communication

Standard communication mode	RS485/USB, Optional: WiFi/GPRS						
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General Data

Ambient temperature range	-30°C~+60°C						
Self-consumption at night	<1W						
Topology	Transformerless						
Degree of protection	IP65						
Allowable relative humidity range	0~100%						
Max. Operating altitude	4000m						
Noise	<25dB						
Weight	9.2kg	9.2kg	9.2kg	10kg	10kg	10kg	10kg
Cooling	Natural						
Dimension	349*344*164mm						
Display	LCD&Bluetooth+APP						
Standard warranty	5 years, Optional: 7&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	VDE-AR-N 4105, VDE V 0126-1-1, V 0124-100, AS/NZS 4777, CEI 0-21, G98/G99, C10/11, EN 50549, RD 1699						










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-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	3990Wp	4790Wp	5320Wp	6120Wp	6650Wp	7980Wp	9980Wp
Max DC power for single MPPT	3500W	3500W	3500W	3500W	3500W	3500W	2*2750W/ 2750W
Number of MPP trackers				2			
Number of DC inputs				1/1			
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			
Maximum DC input short circuit current per MPPT				13.2A			

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				
MPPT efficiency				>99.9%				

Protection

DC reverse polarity protection				Yes			
DC switch				Optional			
Protection class/overvoltage category				I/III			
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°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				
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, 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 voltage, over current, over temperature, Anti-islanding 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
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Input (DC)

Recommended Max. PV input power	4390Wp	5860Wp	6650Wp	7320Wp	8780Wp	11710Wp	14630Wp	15960Wp
Max DC power for single MPPT	3550W	4500W	5700W	5700W	6250W	6200W	6200W	6850W
Number of MPP 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-850V	190V-850V	240V-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	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							
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, EN50549, G83, Rd1699, UTE C15-712-1, EN50530, NB/T32004							

The models marked with "*" should be available only for some designated countries.

SOFAR 3300/4400/5000/5500/6600/8800/11000/12000TL-X_EN_202103_V1



SOFAR 3.3K~12KTLX-G3

3300/4400/5000/5500/6600/8800/10000/11000/12000

Three-Phase Dual-MPPT



Remote firmware upgrade

98.6%

Maximum efficiency 98.6%



Smart string level monitoring

SPD

Type II SPD for both DC and AC

1100v

Maximum DC input voltage 1100V



Natural cooling, no fans, low noise



Low start-up voltage, wide MPPT voltage

Datasheet	SOFAR 3.3KTLX-G3	SOFAR 4.4KTLX-G3	SOFAR * 5KTLX-G3 (Australia)	SOFAR 5.5KTLX-G3	SOFAR 6.6KTLX-G3	SOFAR 8.8KTLX-G3	SOFAR * 10KTLX-G3 (Australia)	SOFAR 11KTLX-G3	SOFAR 12KTLX-G3
Input (DC)									
Recommended Max. PV input power	4500Wp	6000Wp	7500Wp	7500Wp	9000Wp	12000Wp	15000Wp	15000Wp	18000Wp
Number of MPP trackers	2								
Number of DC inputs	1/1	1/1	1/1	1/1	1/1	1/1	2/1	1/1	2/1
Max. input voltage	1100V								
Start-up voltage	160V								
Rated input voltage	650V								
MPPT operating voltage range	140V-1000V								
Full power MPPT voltage range	160V-850V	190V-850V	240V-850V	240V-850V	290V-850V	380V-850V	420V-850V	420V-850V	420V-850V
Max. input MPPT current	13A/13A	13A/13A	13A/13A	13A/13A	13A/13A	13A/13A	26A/13A	13A/13A	26A/13A
Max. input short circuit current per MPPT	18A/18A	18A/18A	18A/18A	18A/18A	18A/18A	18A/18A	36A/18A	18A/18A	36A/18A
Output (AC)									
Rated power	3000W	4000W	5000W	5000W	6000W	8000W	10000W	10000W	12000W
Max. AC power	3300VA	4400VA	5000VA	5500VA	6600VA	8800VA	11000VA	11000VA	13200VA
Max. Output current	4.8A	6.4A	7.3A	8.0A	9.6A	12.8A	15.9A	15.9A	19.1A
Nominal grid voltage	3/N/PE, 220V/380Vac, 230V/400Vac								
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 (adjustable +/-0.8)								
Performance									
Max efficiency	98.40%	98.40%	98.40%	98.40%	98.40%	98.50%	98.50%	98.50%	98.50%
European weighted efficiency	97.50%	97.50%	97.50%	97.50%	97.50%	98.00%	98.00%	98.00%	98.00%
Self-consumption at night	< 1W								
MPPT efficiency	> 99.9%								
Protection									
DC reverse polarity protection	Yes								
Anti-islanding protection	Yes								
Leakage current protection	Yes								
Ground fault monitoring	Yes								
PV-array string fault monitoring	Yes								
Anti reverse power function	Optional								
DC switch	Yes								
AFCI protection	Optional								
Input / output SPD	PV: type II standard, AC: type II standard								
Communication									
Power management unit	According to certification and request								
Standard communication mode	RS485/ USB/ Bluetooth, Optional: WiFi / GPRS								
Operation data storage	25 years								
General Data									
Ambient temperature range	-30°C~ +60°C								
Topology	Transformerless								
Degree of protection	IP65								
Allowable relative humidity range	0~100%								
Max. Operating altitude	4000m								
Noise	<40dB								
Weight	15kg	15kg	15kg	15kg	15kg	17kg	17kg	17kg	17kg
Cooling	Natural								
Dimension	430*375*179mm								
Display	LCD&Bluetooth + APP								
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	IEC62109-1/2, IEC62116, IEC61727, IEC61683, 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/CEI 0-16, UNE 206 007-1, EN50549, G98/G99, EN50530, NB/T32004								

The models marked with "*" should be available only for some designated countries.

SOFAR 3.3K/4.4K/5K/5.5K/6.6K/8.8K/10K/11K/12KTLX-G3_EN_202303_V1










SOFAR 15K~24KTLX-G3

15000/17000/20000/22000/24000

Three-Phase

Dual-MPPT

-  Remote firmware upgrade
-  Smart string level monitoring
-  Maximum DC input voltage 1100V
-  Low start-up voltage, wide MPPT voltage

-  Maximum efficiency 98.75%
-  Type II SPD for both DC and AC
-  110% long-time overload ability

Datasheet	SOFAR 15KTLX-G3	SOFAR 17KTLX-G3	SOFAR 20KTLX-G3	SOFAR 22KTLX-G3	SOFAR 24KTLX-G3
Input (DC)					
Recommended Max. PV input power	22500Wp	25500Wp	30000Wp	33000Wp	36000Wp
Number of MPP trackers	2				
Number of DC inputs	2/2				
Max. input voltage	1100V				
Start-up voltage	160V				
Rated input voltage	650V				
MPPT operating voltage range	140V-1000V				
Full power MPPT voltage range	420V-850V	450V-850V	480V-850V	510V-850V	540V-850V
Max. input MPPT current	26A/26A	26A/26A	26A/26A	26A/26A	26A/26A
Max. input short circuit current per MPPT	36A/36A	36A/36A	36A/36A	36A/36A	36A/36A
Output (AC)					
Rated power	15000W	17000W	20000W	22000W	24000W
Max. AC power	16500VA	18700VA	22000VA	24200VA	26400VA
Max. Output current	23.9A	27.1A	31.9A	35.1A	38.3A
Nominal grid voltage	3/N/PE, 220V/380Vac, 230V/400Vac				
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 (adjustable +/- 0.8)				
Performance					
Max efficiency	98.60%				
European weighted efficiency	98.20%				
Self-consumption at night	< 1W				
MPPT efficiency	> 99.9%				
Protection					
DC reverse polarity protection	Yes				
Anti-islanding protection	Yes				
Leakage current protection	Yes				
Ground fault monitoring	Yes				
PV-array string fault monitoring	Yes				
Anti reverse power function	Optional				
DC switch	Yes				
AFCL protection	Optional				
Input / output SPD	PV: type II standard, AC: type II standard				
Communication					
Power management unit	According to certification and request				
Standard communication mode	RS485/ USB/ Bluetooth, Optional: WiFi / GPRS				
Operation data storage	25 years				
General Data					
Ambient temperature range	-30°C~+60°C				
Topology	Transformerless				
Degree of protection	IP65				
Allowable relative humidity range	0~100%				
Max. Operating altitude	4000m				
Noise	< 40dB				
Weight	20kg	22kg	22kg	23kg	23kg
Cooling	Fan				
Dimension	520*430*189mm				
Display	LCD&Bluetooth + APP				
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	IEC62109-1/2, IEC62116, IEC61727, IEC61683, 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/CEI 0-16, UNE 206 007-1, EN50549, G98/G99, 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 DRM port and logic



Outdoor IP65 protection level



I-V curve scanning function



Smart control and flexible configuration

Datasheet

SOFAR 10000TL-G2

SOFAR 12000TL-G2

SOFAR 15000TL-G2

Input (DC)

Max. PV input power	18000Wp	18000Wp	19950Wp
Max DC power for single MPPT	11000W/7500W	11000W/7500W	11000W/7500W
Number of MPP trackers		2	
Number for DC inputs		2/1	
Max. input voltage		1000V	
Start-up voltage		200V	
Rated input voltage		600V	
MPPT operating voltage range		160V-960V	
Full power MPPT voltage range	350V-850V	500V-850V	500V-850V
Max. input MPPT current		21A/11A	
Maximum DC input short circuit current per MPPT		30A/15A	

Output (AC)

Rated power	10000W	12000W	15000W
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		>0.99 (adjustable +/-0.8)	

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	Transformerless		
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, EN50549, V 0126-1-1, NB/T32004



SOFAR 20K~33KTL-G2

20000/ 25000/ 30000/ 33000

Three-Phase Dual-MPPT

4"

Super large 4-inch LCD

1100v

1100V voltage level design

DRM

Built-in DRM port and logic

98.6%

Max. efficiency up to 98.6%

I-V

I-V curve scanning function

SPD

Built-in SPD, over / under voltage, over current, over temperature, Anti-islanding and other multiple protections

Datasheet	SOFAR 20000TL-G2	SOFAR 25000TL-G2	SOFAR 30000TL-G2	SOFAR 33000TL-G2
Input (DC)				
Recommended Max. PV input power	26600Wp	33250Wp	39900Wp	43890Wp
Max DC power for single MPPT	13000W	16000W	18000W	20000W
Number of MPP trackers	2			
Number for DC inputs	2 for each MPPT	3 for each MPPT	3 for each MPPT	3 for each MPPT
Max. input voltage	1100V			
Start-up voltage	250V			
Rated input voltage	620V			
MPPT operating voltage range	230V-960V			
Full power MPPT voltage range	480V-850V	460V-850V	520V-850V	580V-850V
Max. input MPPT current	24A/24A	28A/28A	30A/30A	30A/30A
Maximun DC input short circuit current per MPPT	30A	35A	37.5A	37.5A
Output (AC)				
Rated power	20000W	25000W	30000W	33000W
Max. AC power	22000VA	27500VA	33000VA	36300VA
Max. Output current	32A	40A	48A	53A
Nominal grid voltage	3/N/PE, 220/380Vac, 230/400Vac, 240/415Vac			
Grid voltage range	310Vac-480Vac (According to local standard)			
Nominal frequency	50/60Hz			
Grid Frequency range	45Hz-55Hz/54Hz-66Hz (According to local standard)			
Active power adjustable range	0~100%			
THDi	<3%			
Power factor	>0.99 (adjustable +/-0.8)			
Performance				
Max efficiency	98.2%	98.4%	98.4%	98.6%
European weighted efficiency	98.0%	98.2%	98.2%	98.2%
Self-consumption at night	<1W			
MPPT efficiency	>99.9%			
Protection				
DC reverse polarity protection	Yes			
DC switch	Yes			
Protection class/ overvoltage category	I/III			
Safety protection	Anti islanding, RCMU, Ground fault monitoring			
ARPC	Anti reverse power controller (optional)			
Communication				
Power management unit	According to certification and request			
Standard communication mode	RS485, Wifi/Ethernet/GPRS(optional), SD card			
Operation data storage	25 years			
General Data				
Ambient temperature range	-25°C ~ +60°C			
Topology	Transformerless			
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 61000-3-11, EN 61000-3-12			
Safety standards	IEC62109-1/2, IEC62116, IEC61727, IEC-61683, IEC60068(1,2,14,30), IEC60255			
Grid standards	AS/NZS 4417, VDE V 0124-100, V 0126-1-1, VDE-AR-N 4105, CEI 0-21/CEI 0-16, EN 50549, G59, P.O. 12.3, RD1699, UTE C15-712-1, EN 50530, NB/T32004			









SOFAR 30K~40KTL

30000/ 33000/ 36000/ 40000



Three-Phase Dual-MPPT

-  Super large 4-inch LCD
-  Fuse free design
-  Outdoor IP65 protection level
-  I-V curve scanning function
-  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	39900Wp	43890Wp	47880Wp	53200Wp
Max DC power for single MPPT	15360W	17000W	20400W	20400W
Number of MPP trackers	2			
Number for DC inputs	4 for each MPPT			
Max. input voltage	1000V			
Start-up voltage	350V			
Rated input voltage	600V	600V	600V	700V
MPPT operating voltage range	250V-960V			
Full power MPPT voltage range	480V-800V	480V-800V	500V-800V	560V-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	40A	42A	40A
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	>0.99 (adjustable +/-0.8)			
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	Transformerless			
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 61000-6-4			
Safety standards	IEC62109-1/2, IEC62116, IEC61727, IEC-61683, IEC60068(1,2,14,30)			
Grid standards	AS/NZS 4777, AS/NZS 61000, VDE V 0124-100, V 0126-1-1, VDE-AR-N 4105, CEI 0-21/CEI 0-16, EN50549, G59, Rd1699, UTE C15-712-1, EN50530			










SOFAR 50K~70KTL

50000/ 60000/ 70000

Three-Phase

Three-MPPT

-  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, Anti-islanding and other multiple protections
-  Fuse free design
-  Built-in DRM port and logic
-  Max. efficiency up to 98.6%

Datasheet	SOFAR 50000TL	SOFAR 60000TL	SOFAR 70000TL-HV
Input (DC)			
Recommended Max. PV input power	66500Wp	79800Wp	93100Wp
Max DC power for single MPPT	22000W	22000W	26000W
	16000W	22000W	26000W
	16000W	22000W	26000W
Number of MPP 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-950V	
Full power MPPT 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	75000VA
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	>0.99 (adjustable +/-0.8)		
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°C~+60°C		
Topology	Transformerless		
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, EN50549, G59, EN50530, NB/T32004		




SOFAR

80K~136KTL

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

Three-Phase

Eight to twelve MPPTs

-  Max. efficiency up to 99%
-  Outdoor IP66 protection level
-  Type II SPD for both DC and AC
-  Support Modbus communication, external Wifi/ PLC/ GPRS (optional)
-  AC / DC dual power supply redundant design, 24-hour status monitoring
-  Remote firmware upgrade
-  I-V curve scanning function
-  Maximum 12 MPP trackers with 1.5* DC overload

Datasheet

**SOFAR
80KTL****SOFAR
100KTL****SOFAR
110KTL****SOFAR
100KTL-HV****SOFAR
125KTL-HV****SOFAR
136KTL-HV**

Input (DC)

Max. input voltage	1100V					
Rated input voltage	625V	625V	625V	725V	725V	785V
Start-up voltage	200V					
MPPT operating voltage range	180V-1000V					
Full power MPPT voltage range	500V-850V	500V-850V	500V-850V	550V-850V	550V-850V	550V-850V
Number of MPP trackers	8	10	10	10	10	12
Number for DC inputs	16	20	20	20	20	24
Max. input current per MPPT	26A					
Max. input short circuit current per MPPT	40A					

Output (AC)

Rated power	80kW	100kW	110kW	100kW	125kW	136kW
Max. AC power	88kVA	110kVA	121kVA	110kVA	137kVA	150kVA
Max. output current	128A	160A	175A	128A	160A	160A
Nominal grid voltage	3/N/PE, 230V/400Vac, 220V/380Vac			3/PE, 500Vac		3/PE, 540Vac
Grid voltage range	310Vac-480Vac	310Vac-480Vac	310Vac-480Vac	400Vac-575Vac	400Vac-575Vac	432Vac-621Vac
Nominal frequency	50/60Hz					
Grid frequency range	45Hz-55Hz/54Hz-66Hz (According to local standard)					
Active power adjustable range	0~100%					
THDi	<3%					
Power factor	1 default (adjustable +/- 0.8)					

Performance

Max. Efficiency	98.60%	98.70%	98.75%	98.80%	99.00%	99.00%
European weighted efficiency	98.20%	98.30%	98.30%	98.50%	98.50%	98.51%
MPPT efficiency	>99.9%					

Protection

DC reverse polarity protection	Yes
Anti-islanding protection	Yes
Leakage current protection	Yes
Ground fault monitoring	Yes
PV-array string fault monitoring	Yes
Zero voltage ride through	Yes
DC switch	Yes
Anti-PID protection	Optional
AFCI	Optional
Protection class/ Overvoltage category	I/III
Input/ Output SPD	PV: type II standard, AC: type II standard

Communication

Power management unit	According to certification and request
Communication	RS485, Optional: WiFi /GPRS /PLC
Operation data storage	25 years

General Data

Ambient temperature range	-30°C ~ +60°C					
Topology	Transformerless					
Degree of protection	IP66					
Allowable relative humidity range	0~100%					
Max. operating altitude	4000m					
Weight	88kg	90kg	90kg	90kg	90kg	92kg
Cooling	Smart forced air cooling					
Dimension	995.5*663.5*368mm					
Display	LCD&Bluetooth+APP					
Warranty	5 years/ 7 years/ 10 years					

Standard

EMC	EN 61000-6-2, EN 61000-6-4					
Safety standard	IEC62109-1/2, IEC62116, IEC61727, IEC-61683, IEC60068(1,2,14,30)					
Grid standard	AS/NZS 4777, VDE V 0124-100, V 0126-1-1, VDE-AR-N 4105, CEI 0-21/CEI 0-16, UNE 206 007-1, EN50549, G99, EN50530, NB/T32004					



SOFAR

250K~255KTL-HV

250KTL-HV / 255KTL-HV

Three-Phase

Twelve MPPTs



Built-in Anti-PID and PID recovery



Compatible with Al and Cu AC cables



IP66 and C5 protection



IV curve scan and diagnosis



Type II SPD for both DC and AC



12*MPPT with max. efficiency 99.01%



Touch free commissioning and remote firmware upgrade



AC / DC dual power supply redundant design, 24-hour status monitoring

Datasheet

SOFAR 250KTL-HV

SOFAR 255KTL-HV

Input (DC)

Max. input voltage	1500V
Rated input voltage	1080V
Start-up voltage	550V
MPPT operating voltage range	500V-1500V
Full power MPPT voltage range	800V-1300V
Number of MPP trackers	12
Number for DC inputs	24
Max. input MPPT current	30A*12
Max. input short circuit current	50A*12

Output (AC)

AC output power	250kVA@30°C / 235kVA@40°C / 220kVA@50°C	255kVA@30°C / 235kVA@40°C / 220kVA@50°C
Max. output current	180.5A	184A
Nominal grid voltage	3/PE, 800Vac	
Grid voltage range	640Vac-920VVac	
Nominal frequency	50 / 60Hz	
Grid frequency range	45~55Hz / 55~65Hz (According to local standard)	
Active power adjustable range	0~100%	
THDi	<3%	
Power factor	I default (adjustable +/- 0.8)	

Performance

Max. Efficiency	99.01%
European efficiency	98.80%

Protection

DC reverse polarity protection	Yes
Anti-islanding protection	Yes
Leakage current protection	Yes
Ground fault monitoring	Yes
PV-array string fault monitoring	Yes
Zero voltage ride through	Yes
DC switch	Yes
Anti-PID function	Optional
AFCl protection	Optional
Protection class/ Overvoltage category	I/III
Input/ Output SPD	PV: type II standard AC: type II Standard

Communication

Communication	RS485 /USB /Bluetooth, Optional: WiFi /GPRS /PLC
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General Data

Ambient temperature range	-30°C ~ +60°C
Self-consumption at night	<2W
Topology	Transformerless
Degree of protection	IP66
Allowable relative humidity range	0~100%
Max. operating altitude	4000m
Noise	≤60 dB
Weight	99kg
Cooling	Smart forced air cooling
Dimension	1100.5*713.5*368mm
Display	LCD&Bluetooth+APP
Standard warranty	5 years/ 7 years/ 10 years

Standard








EMC	EN 61000-6-2, EN 61000-6-4
Safety standard	IEC62109-1/2, IEC62116, IEC61727, IEC-61683, IEC60068(1,2,14,30)
Grid standard	AS/NZS 4777, VDE V 0124-100, V 0126-1-1, VDE-AR-N 4105, CEI 0-21/CEI 0-16, UNE 206 007-1, EN50549, G99, EN50530, NB/T32004



ME 3000SP

3KW AC

Coupled energy storage inverter

-  A variety 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	60A
Charging current range	0-60A (Programmable)
Charging curve	3-Stage adaptive with maintenance
Max. Discharging current	60A
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
SPD protection	III

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 display
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
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, EN50549, G83/G98, UTE C15-712-1



ME

5k~20kTL-3PH

5000/6000/8000/10000/15000/20000

5K~20KW AC

Coupled energy storage inverter



Compact design with functional LCD

97.8%

Max. battery charge/discharge efficiency 97.8%



Wide battery voltage range(180-800V)



Off-grid and On-grid output can be connected to unbalanced load



Flexible switching between grid-tied mode and energy storage mode



2 strings of battery input with maximum 50A charge and discharge current

Datasheet

ME 5KTL-3PH ME 6KTL-3PH ME 8KTL-3PH ME 10KTL-3PH ME 15KTL-3PH ME 20KTL-3PH

Battery Input Data

Battery type	Li-Ion & Lead-acid					
No. of battery input	1			2		
Battery voltage range	180V~800V					
Battery voltage range for full load	200V~800V	240V~800V	320V~800V	200V~800V	300V~800V	400V~800V
Nominal charging/discharging power	5000W	6000W	8000W	10000W	15000W	20000W
Max. charging/discharging current					50A(25A/25A)	
Peak charging/discharging current, Duration					70A(35A/35A), 60s	
Charging strategy for battery	Self-adaption to BMS					
Communication interfaces	CAN(RS485)					

AC Output Data (On-grid)

Nominal AC power	5000W	6000W	8000W	10000W	15000W	20000W
Max. AC power output to utility grid	5500VA	6600VA	8800VA	11000VA	16500VA	22000VA
Max. AC power from utility grid	10000VA	12000VA	16000VA	20000VA	30000VA	40000VA
Max. AC current output to utility grid	8A	10A	13A	16A	24A	32A
Max. AC Current from utility grid	15A	17A	24A	29A	44A	58A
Nominal grid voltage	3/N/PE, 220/380Vac, 230/400Vac					
Grid voltage range	184Vac~276Vac					
Nominal grid frequency	50/60Hz					
Grid frequency range	45Hz~55Hz/55Hz~65Hz					
Output power factor	~1(0.8 leading to 0.8 lagging)					
Output THDi (@Nominal output)	<3%					

AC Output Data (Back-up)

Nominal output power	5000W	6000W	8000W	10000W	15000W	20000W
Max. output power	5500VA	6600VA	8800VA	11000VA	16500VA	22000VA
Peak output power, Duration	10000VA, 60s	12000VA, 60s	16000VA, 60s	20000VA, 60s	22000VA, 60s	22000VA, 60s
Max. output current	8A	10A	13A	16A	24A	32A
Peak output current, Duration	15A, 60s	18A, 60s	24A, 60s	30A, 60s	32A, 60s	32A, 60s
Nominal output voltage	3/N/PE, 220/380Vac, 230/400Vac					
Nominal output frequency	50/60Hz					
Output THDv (@Liner load)	<3%					
Switch time	<10ms					

Efficiency

Max. discharge efficiency	97.6%			97.8%		
Max. charge efficiency	97.6%			97.8%		

Protection

DC switch	Yes					
PV reverse polarity protection	Yes					
Output over current protection	Yes					
Output over voltage protection	Yes					
Anti-islanding protection	Yes					
Residual current detection	Yes					
Insulation resistor detection	Yes					
Surge protection level	AC: Type II, DC: Type III					
Battery reverse protection	Yes					

Feature

DC terminal	MC4					
Grid AC terminal	5P Connector					
Back-up AC terminal	5P Connector					
Display	LCD Display					
Monitoring interfaces	Bluetooth / RS485 / WIFI / GPRS (optional)					
Parallel operation	Yes					
Standard warranty	Standard 5 years					

General Data

Dimension	586.6*515*261.2mm					
Weight	30kg			34kg		
Inverter topology	Transformerless					
Standby self consumption	<15W					
Operating temperature range	-30°C~60°C					
Relative humidity	0~100%					
Noise	<45dB					
Operating altitude	<4000m					
Cooling	Natural			Forced airflow		
Protection degree	IP65					

Certifications & Standards

EMC	EN61000-1, EN61000-2, EN61000-3, EN61000-4, EN61000-4-16, EN61000-4-18, EN61000-4-29					
Safety	IEC62109-1, IEC62109-2, NB-T32004/IEC62040-1					
Grid	AS/NZS 4777, VDE V 0124-100, V0126-1-1, VDE-AR-N 4105, CEI 0-21/CEI 0-16, EN50438/EN50549, G83/G59/G98/G99, UTE C15-712-1, UNE206 007-1					



HYD 3K~6K-ES

3000/3600/4000/4600/5000/6000

Single-Phase Energy storage integrated inverter



-  Outdoor IP65 design
-  Compatible with on grid and off grid
-  A variety of work modes are optional
-  EPS function, switching time is less than 10ms
-  Built-in zero export function
-  Flexible configuration of lead acid or lithium battery
-  Integrated fanless self-recognition heat dissipation design

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	3990Wp	4790Wp	5320Wp	6120Wp	6650Wp	7980Wp
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	13.2A					
Peak Output Apparent Power	4000VA, 10s					
THD	< 3%					
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					
SPD protection	III					
General Data						
Ambient temperature range	-25°C~+60°C (Above 45°C 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, EN50549, G83/G59/G98/G99, UTE C 15-712-1, UNE 206 007-1					
The models marked with * * * should be available only for some designated countries.				HYD 3000/3600/4000/4600/5000/6000-ES_EN_202103_V1		



HYD 3K~6K-EP

3000/3680/4000/4600/5000/5500/6000

Single-Phase Energy storage integrated inverter



Outdoor IP65 design



Compatible with on grid and off grid



A variety of work modes are optional



EPS function, switching time is less than 10ms



Built-in zero export function



Flexible configuration of lead acid or lithium battery



Integrated fanless self-recognition heat dissipation design

Datasheet	HYD 3000-EP	HYD 3680-EP	HYD 4000-EP	HYD 4600-EP	HYD * 5000-EP (Australia)	HYD 5500-EP	HYD 6000-EP
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	3750W	4000W	4250W	5000W	5000W	5000W	5000W
Maximum charging current	75A	80A	85A	100A	100A	100A	100A
Maximum discharging current	75A	80A	85A	100A	100A	100A	100A
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	4500Wp	5400Wp	6000Wp	6900Wp	7500Wp	7500Wp	9000Wp
Max DC power for single MPPT	3500W						
Max. input voltage	600V						
Start-up voltage	100V						
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	250V-520V	300V-520V
Number of MPP trackers	2						
Max. input current per MPPT	13A/13A						
Max. input short circuit current per MPPT	18A/18A						
Output / Input AC (Grid side)							
Nominal AC power	3000W	3680W	4000W	4600W	5000W	5000W	6000W
Max. AC power output to utility grid	3300VA	3680VA	4400VA	4600VA	5000VA	5500VA	6000VA
Max. AC power from utility grid	6000VA	7360VA	8000VA	9200VA	10000VA	10000VA	12000VA
Max. AC current output to utility grid	15A	16A	20A	20.9A	21.7A	25A	27.3A
Max. AC current from utility grid	27.3A	32A	36.4A	41.8A	43.4A	43.4A	54.6A
Nominal grid voltage	L/N/PE, 220V, 230V, 240V						
Grid voltage range	180Vac-276Vac (According to local standard)						
Nominal frequency	50Hz / 60Hz						
Output THDi (@Nominal output)	< 3%						
Power factor	1 default (+/-0.8 adjustable)						
Output AC (Emergency Power Supply)							
Max. apparent power	3000VA	3680VA	4000VA	4600VA	5000VA	5000VA	5000VA
Peak output power,Duration	3600VA, 60s	4400VA, 60s	4800VA, 60s	5520VA, 60s	6000VA, 60s	6000VA, 60s	6000VA, 60s
Max. output current	13.6A	16A	18.2A	20.9A	22.7A	22.7A	22.7A
Nominal voltage, Frequency	220V/230V, 50/60Hz						
THDv (@Liner load)	< 3%						
Switch time	10ms default						
Efficiency							
MPPT efficiency	99.9%						
Max efficiency of solar inverter	97.6%	97.6%	97.6%	97.8%	97.8%	97.8%	98.0%
European efficiency of solar inverter	97.2%	97.2%	97.2%	97.3%	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						
DC switch	Yes						
Firm frequency response function	Optional						
SPD protection	MOV: Type III standard						
General Data							
Ambient temperature range	-30°C~ +60°C (Above 45°C Derating)						
Standby self-consumption	< 10W						
Topology	High frequency insulation (for bat)						
Degree of protection	IP65						
Allowable relative humidity range	0~100%						
Communication	RS485, Wifi/Ethernet/GPRS, CAN2.0						
Protective class	Class I						
Max. operating altitude	4000m						
Current sensor connection	External						
Noise	< 25dB						
Weight	21.5kg						
Cooling	Natural						
Dimension	482*503*183mm						
Display	LCD & APP + Bluetooth						
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, EN50549, G83/G59/G98/G99, UTE C 15-712-1, UNE 206 007-1						

The models marked with "*" should be available only for some designated countries.

HYD 3000/3680/4000/4600/5000/5500/6000-EP_EN_202103_V1









HYD 5K~20KTL-3PH

5000/6000/8000/10000/15000/20000



Three-Phase Energy storage integrated inverter

-  2 MPPT inputs, more flexible configuration
-  APF Maximum two battery inputs
-  Diversified work patterns and rapid gains
-  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 5KTL-3PH HYD 6KTL-3PH HYD 8KTL-3PH HYD 10KTL-3PH HYD 15KTL-3PH HYD 20KTL-3PH

Battery Input Data

Battery type	Li-Ion					
No. of battery input	1	1	1	2	2	2
Battery voltage range	180V-800V					
Battery voltage range for full load	200V-800V	240V-800V	320V-800V	200V-800V	300V-800V	400V-800V
Nominal charging/discharging power	5000W	6000W	8000W	10000W	15000W	20000W
Max. charging/discharging current	25A	25A	25A	50A(25A/25A)	50A(25A/25A)	50A(25A/25A)
Peak charging/discharging current, Duration	40A, 60s	40A, 60s	40A, 60s	70A(35A/35A), 60s	70A(35A/35A), 60s	70A(35A/35A), 60s
Charging strategy for battery	Self-adaption to BMS					
Communication interfaces	CAN(RS485)					

PV String Input Data

Recommended Max. PV input power	7500Wp(6000Wp/6000Wp)	9000Wp(6600Wp/6600Wp)	12000Wp(6600Wp/6600Wp)	15000Wp(7500Wp/7500Wp)	22500Wp(11250Wp/11250Wp)	30000Wp(15000Wp/15000Wp)
Max. DC voltage	1000V					
Start-up operating voltage	200V					
MPPT voltage range	180V-960V					
Nominal DC voltage	600V					
Full power MPPT voltage range	250V-850V	320V-850V	360V-850V	220V-850V	350V-850V	450V-850V
Max. input current	12.5A/12.5A	12.5A/12.5A	12.5A/12.5A	25A/25A	25A/25A	25A/25A
Max. short current	15A/15A	15A/15A	15A/15A	30A/30A	30A/30A	30A/30A
No. of MPP trackers	2					
No. of strings per MPP tracker	1	1	1	2	2	2

AC Output Data (On-grid)

Nominal AC power	5000W	6000W	8000W	10000W	15000W	20000W
Max. AC power output to utility grid	5500VA	6600VA	8800VA	11000VA	16500VA	22000VA
Max. AC power from utility grid	10000VA	12000VA	16000VA	20000VA	30000VA	40000VA
Max. AC current output to utility grid	8A	10A	13A	16A	24A	32A
Max. AC current from utility grid	15A	17A	24A	29A	44A	58A
Nominal grid voltage	3/N/PE, 220/380Vac, 230/400Vac					
Grid voltage range	184Vac~276Vac					
Nominal grid frequency	50/60Hz					
Grid frequency range	45Hz~55Hz/55Hz~65Hz					
Output power factor	~1 (0.8 leading to 0.8 lagging)					
Output THDi (@Nominal output)	<3%					

AC Output Data (Back-up)

Nominal output power	5000W	6000W	8000W	10000W	15000W	20000W
Max. output power	5500VA	6600VA	8800VA	11000VA	16500VA	22000VA
Peak output power, Duration	10000VA, 60s	12000VA, 60s	16000VA, 60s	20000VA, 60s	22000VA, 60s	22000VA, 60s
Max. output current	8A	10A	13A	16A	24A	32A
Peak output current, Duration	15A, 60s	18A, 60s	24A, 60s	30A, 60s	32A, 60s	32A, 60s
Nominal output voltage	3/N/PE, 220/380Vac, 230/400Vac					
Nominal output frequency	50/60Hz					
Output THDv (@Liner load)	<3%					
Switch time	<20ms					

Efficiency

MPPT efficiency	99.9%					
Euro efficiency	97.5%	97.5%	97.5%	97.7%	97.7%	97.7%
Max. efficiency	98.0%	98.0%	98.0%	98.2%	98.2%	98.2%
Max. battery charge/discharge efficiency	97.6%	97.6%	97.6%	97.8%	97.8%	97.8%

Protection

DC switch	Yes
PV reverse polarity protection	Yes
Output over current protection	Yes
Output over voltage protection	Yes
Anti-islanding protection	Yes
Residual current detection	Yes
Insulation resistor detection	Yes
Surge protection level	II
Battery reverse protection	Yes

General Data

Dimension	571.4*515*264.1mm					
Weight	33kg	33kg	33kg	37kg	37kg	37kg
Inverter topology	Transformerless					
Standby self-consumption	<15W					
Operating temperature range	-30°C~+60°C					
Relative humidity	0~100%					
Noise	<45dB					
Operating altitude	<4000m					
Cooling	Natural	Natural	Natural	Forced airflow	Forced airflow	Forced airflow
Protection degree	IP65					

Feature

DC terminal	MC4
Grid AC terminal	5P Connector
Back-up AC terminal	5P Connector
Display	LCD Display
Monitoring interfaces	Bluetooth / RS485 / WIFI / GPRS (optional)
Parallel operation	Yes
Standard warranty	Standard 5 years

Certifications & Standards

EMC	EN61000-6-1, EN61000-6-3
Safety	IEC62109-1, IEC62109-2, NB-T32004/IEC62040-1
Grid	AS/NZS 4777, VDE V 0124-100, V0126-1-1, VDE-AR-N 4105, CEI 0-16/CEI 0-21, EN50549, G98/G99, UTE C15-712-1



AMASSTORE BATTERY

GTX2000



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

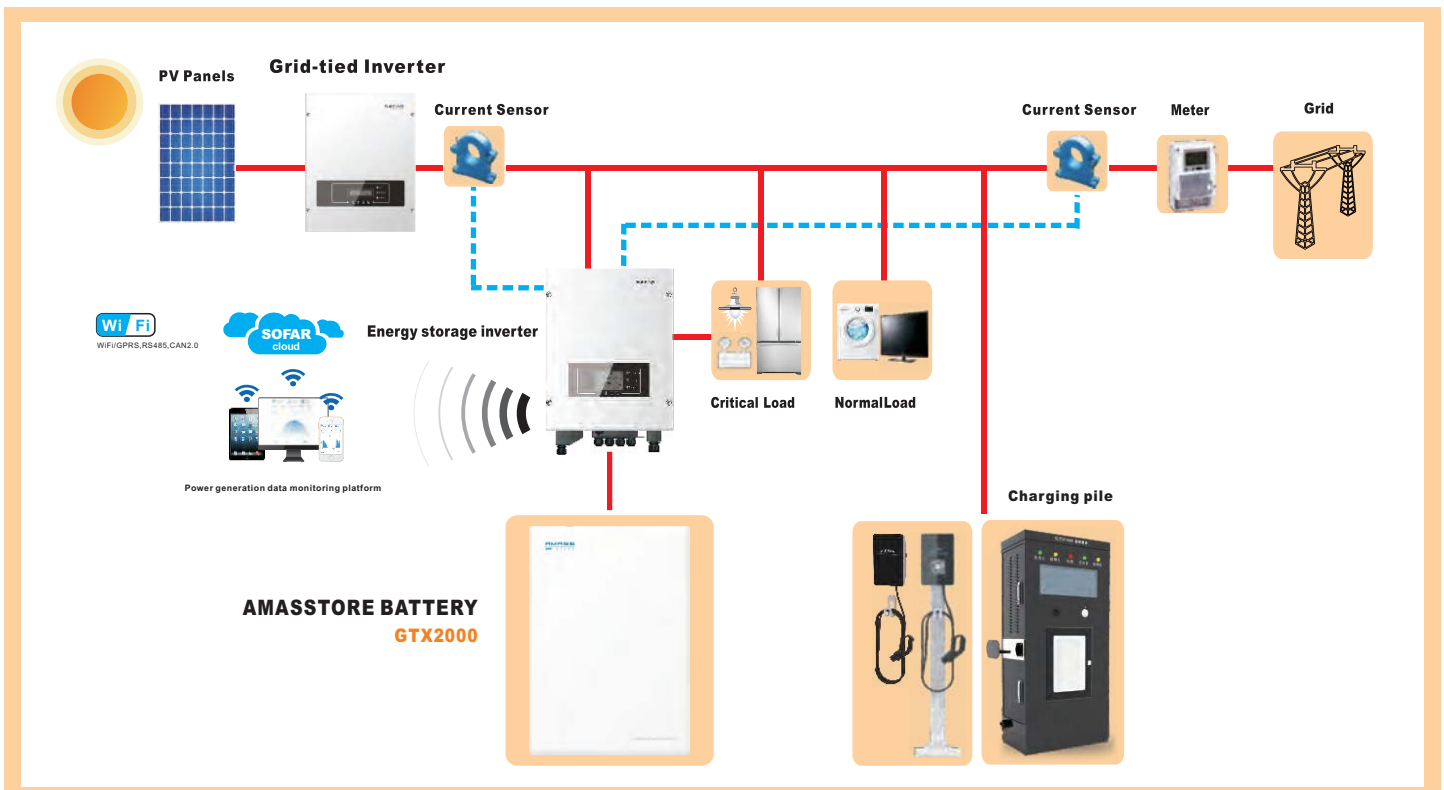
Datasheet

GTX2000

Basic Parameters

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

AC Coupled Solar System





AMASSTORE BATTERY

GTX2500

-  Compatible with multi-brand storage inverters
-  Remote diagnosis and real-time data monitoring
-  Supports parallel expansion, supports up to 8 parallels
-  Certification of IEC62619, UN38.3, IEC62040-1, SAA etc
-  Long cycle life energy storage battery (6000 times)
-  Simple stack installation, time and cost saving
-  Han's Laser automated PACK production line, stable and reliable production quality
-  One-button automatic assignment battery module ID, simple and convenient operation

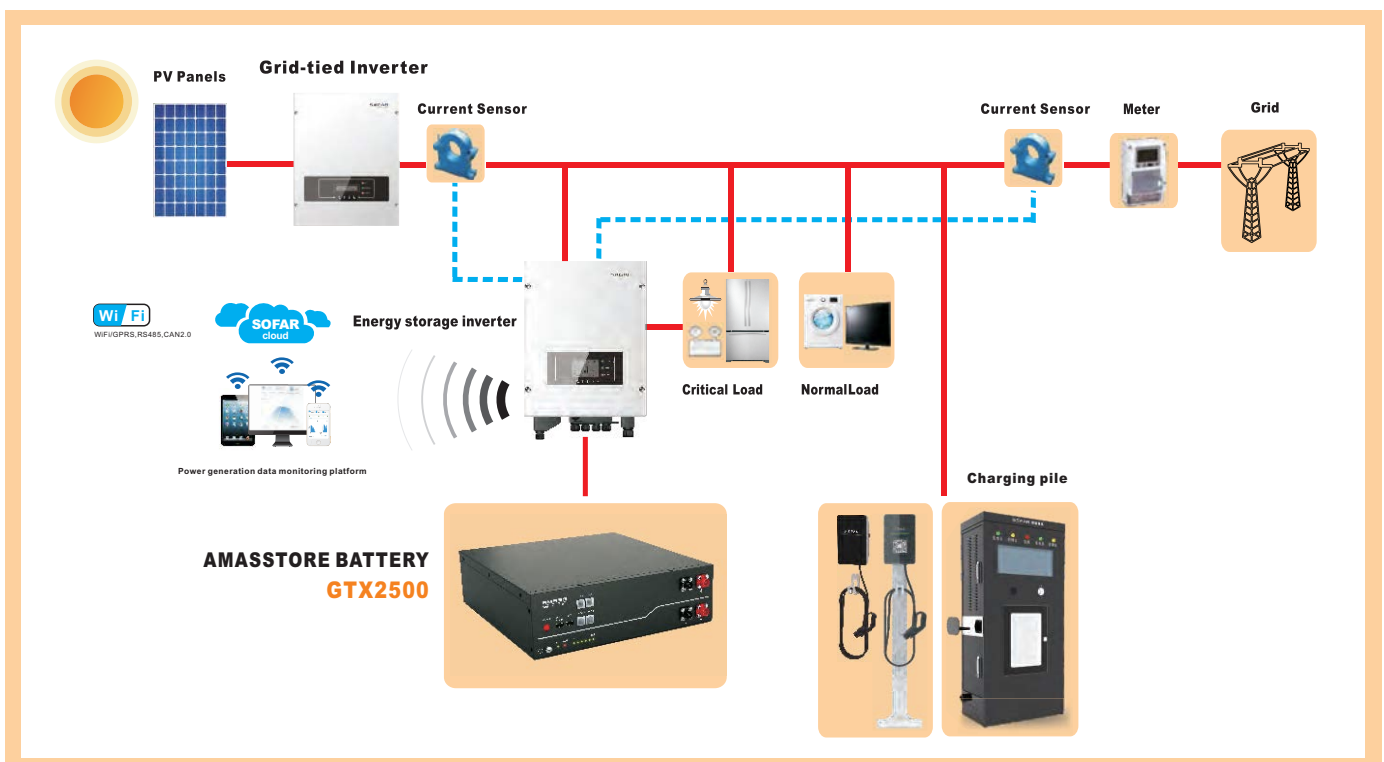
Datasheet

GTX2500

Basic Parameters

Battery Type	LiFePO ₄ , Lithium Iron Phosphate
Nominal Capacity (Ah)	50AH
Nominal Voltage (V)	51.2Vdc
Total Energy	2500Wh
Usable Energy (90% DOD)	2250Wh
Charge Voltage (V)	55.68~56.16Vdc
Discharge Voltage (V)	45.6~56.16Vdc
Nominal Charge Current (A)	25A
Max. Charge Current (A)	30A
Max. Charge Power (W)	1685W
Nominal Discharge Current (A)	25A
Nominal Discharge Power (W)	1280W
Max. Discharge Current (A)	30A
Max. Discharge Power (W)	1500W
Short Current (A)	350A
Communication	RS232, RS485, CAN
Working Temperature	-20 °C~ 60°C
Storage Temperature	≤ 25°C, 12 months ≤ 35°C, 6 months ≤ 45°C, 3 months
Operating Humidity	< 95% RH
Storage Humidity	< 95% RH
Max. Operating Altitude	≤ 2000m
Scalable	Suggest Up to 4
Enclosure Protection Rating	IP20
Net Weight	27Kg
Dimension	400mm*417mm*120mm
Certification	IEC62619, UN38.3, IEC62040-1, SAA etc.
Cycle Life	6000 Cycles@ 80% DOD / 25°C / 0.5C, 60% EOL







AC Coupled Solar System



AMASSTORE BATTERY

GTX3000



-  Remote diagnosis and real-time data monitoring
-  Support soft startup
-  Support battery system direct parallel, up to 4 parallels
-  Support charging activation
-  Long cycle life energy storage battery (6000 times)
-  Certification of IEC62619, UN38.3, IEC62040-1, SAA etc
-  Simple stack installation, time and cost saving
-  Han's Laser automated PACK production line, stable and reliable production quality
-  One-button automatic assignment battery module ID, simple and convenient operation

Datasheet

GTX 3000-H4 GTX 3000-H5 GTX 3000-H6 GTX 3000-H7 GTX 3000-H8 GTX 3000-H9 GTX 3000-H10

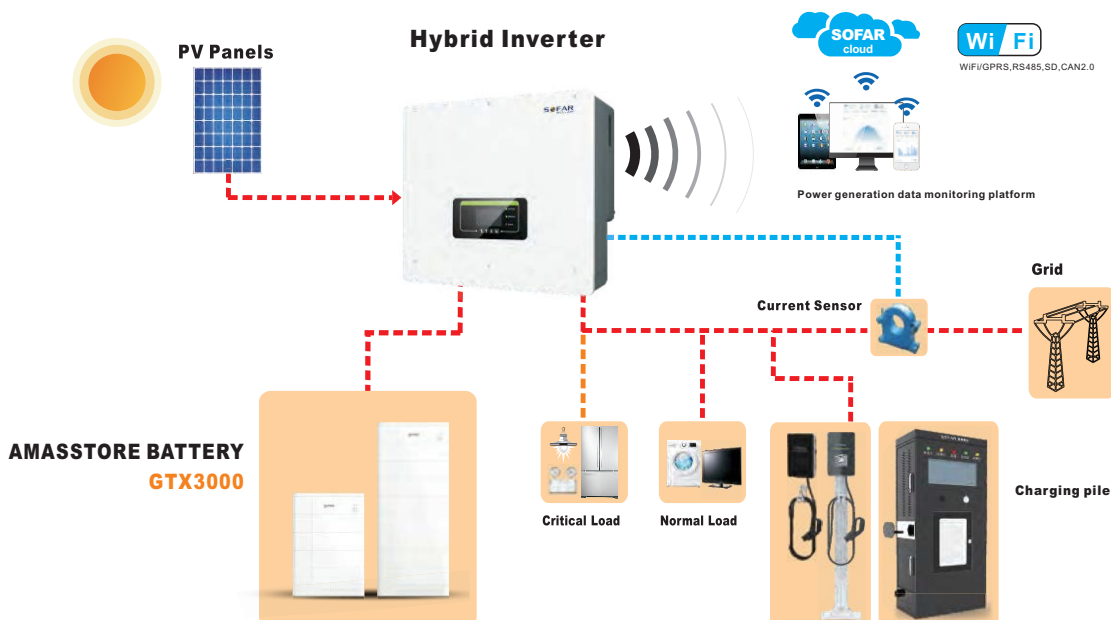
Parameters

Battery Module Quantity	4	5	6	7	8	9	10
Nominal Voltage	204.8V	256V	307.2V	358.4V	409.6V	460.8V	512V
MAX. Charge Voltage	230.4V	288V	345.6V	403.2V	460.8V	518.4V	576V
MIN. Discharge Voltage	182.4V	228V	273.6V	319.2V	364.8V	410.4V	456V
Nominal Energy	10kWh	12.5kWh	15kWh	17.5kWh	20kWh	22.5kWh	25kWh
Available Energy(90%DOD)	9kWh	11.25kWh	13.5kWh	15.75kWh	18kWh	20.25kWh	22.5kWh
Dimension(mm)	515*480*770	515*480*895	515*480*1020	515*480*1145	515*480*1270	515*480*1395	515*480*1520
Weight	138kg	168kg	198kg	228kg	258kg	288kg	318kg
Protection Class	IP65						
Cooling	Natural						
Nominal Charging Current	25A						
Max. Continuous Charging Current	30A						
Nominal Discharge Current	25A						
Max. Continuous Discharge Current	30A						
Working Temperature	-20°C ~ 60°C						
Storage Temperature	≤25°C, 12 months						
	≤35°C, 6 months						
	≤45°C, 3 months						
Environmental humidity	≤ 95%RH (No condensation)						
Operating Altitude	≤2000 m						
Scale	Suggest no more than 4 parallel						
Certificates	UN38.3, IEC62619, IEC62040-1, SAA etc.						
Cycle Life	6000 @ 80% DOD / 25°C / 0.5C / 60% EOL						

Battery module parameters

Battery Type	LiFePO4, Lithium Iron Phosphate
Nominal Voltage	51.2V
Nominal Capacity	50AH
Weight	30kg
Dimension	515*478.8*125 mm
Protection	IP65

Hybrid Solar System





AMASSSTORE BATTERY

GTX5000



Compatible with multi-brand storage inverters



Remote diagnosis and real-time data monitoring



Supports parallel expansion, supports up to 4 parallels



Certification of IEC62619, UN38.3, IEC62040-1, SAA etc



CATL brand battery, long cycle life (6000 times)



Wall-mounted or floor-mounted installation, time and cost saving



Han's Laser automated PACK production line, stable and reliable production quality



One-button automatic assignment battery module ID, simple and convenient operation

Datasheet

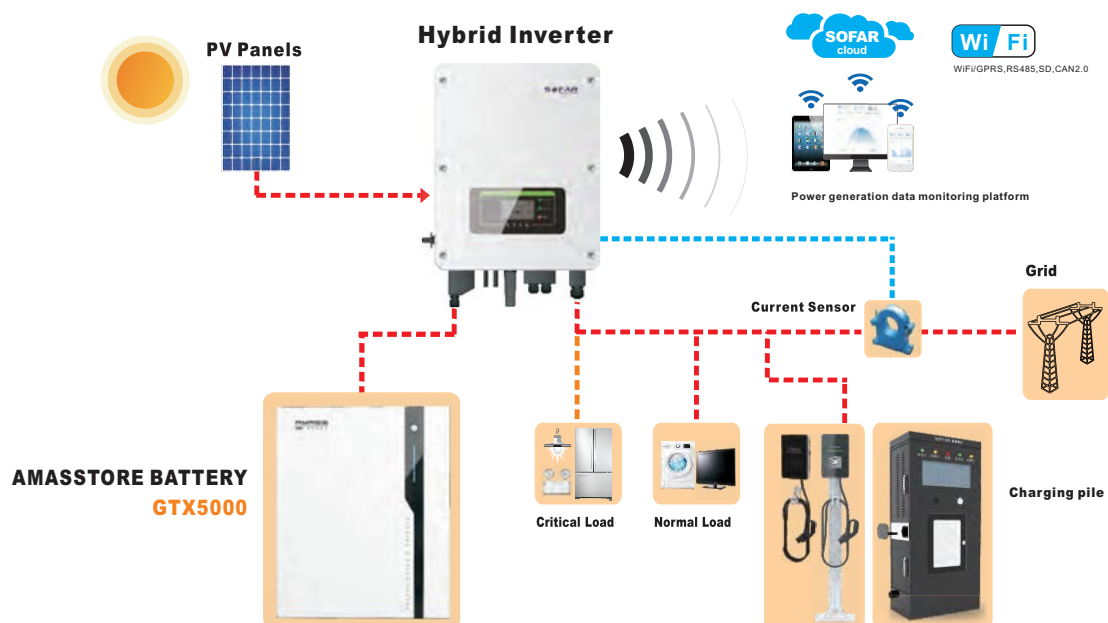
GTX5000

Basic Parameters

Battery Type	LiFePO ₄ , Lithium Iron Phosphate
Nominal Capacity	100AH
Nominal Voltage	51.2Vdc
Total Energy	5120Wh
Usable Energy (90% DOD)	4600Wh
Charge Voltage	55.68~56.16Vdc
Discharge Voltage	45.6~56.16Vdc
Nominal Charge Current	50A
Max. Charge Current	50A
Max. Charge Power	2800W
Nominal Discharge Current	50A
Nominal Discharge Power	2560W
Max. Discharge Current	75A
Max. Discharge Power	3500W
Short Current	350A
Communication	RS232, RS485, CAN
Working Temperature	0 °C ~ 55 °C
Storage Temperature	≤ 25 °C, 12 months ≤ 35 °C, 6 months ≤ 45 °C, 3 months
Operating Humidity	< 95% RH
Storage Humidity	< 95% RH
Max. Operating Altitude	≤ 2000m
Scalable	Suggest Up to 4
Enclosure Protection Rating	IP20
Net Weight	55Kg
Dimension (W*D*H)	480mm*211.5mm*600mm
Certificates	IEC62619, UN38.3, IEC62040-1, SAA etc
Cycle Life	6000 Cycles@ 80% DOD / 25 °C / 0.5C, 60% EOL

Note: Operating current derating according to cell voltage and battery temperature.

Hybrid Solar System





Inverter Logger

GPRS/WIFI&Ethernet

- ▶ Realtime alerts with immediate notification for fast troubleshooting
- ▶ Quick installation and easy operation with "Plug & Play" function
- ▶ Suitable for rural areas where no network connection is available (GPRS Version)
- ▶ High network coverage around the world
- ▶ Devices could be upgraded and debugged remotely for easy maintenance
- ▶ Check the system status anytime and anywhere via online portal or app, no additional software required

Global Data Service

SOFAR SOLAR provides global data service for users around the world. For project sites in rural areas or where no Internet is available, inverter logger ensures stable data transmission to remote server via mobile network, enabling remote monitoring at anytime and anywhere.



- ◆ Data plans for different users



- ◆ Wide network coverage for most countries



- ◆ Pay as you go service & online top up

Datasheet	LIG-1	LIW-1
General Parameters		
No. of Connections	Basic Version: 1-4 Advanced Version: 1-10	Basic Version: 1-4 Advanced Version: 1-10
Inverter Communication Interface	One-way RS485/422	
Remote Communication Interface	GSM	WiFi(802.11b/g/n)/Ethernet
Serial Communication Rate	1200-57600bps(Configurable)	1200-19200bps(Configurable)
Working Frequency	850/900/1800/1900MHz	2.4GHz
Communication Range	-	400m (Open Space)
Transmitting Power	2W(Max.)/1W(Min.)	802.11b/g/n: +20dBm/+18dBm/15dBm(Max.)
Data Collection Interval	Default: 5 mins (1-15 mins Configurable)	
Parameter Setting	Serial Port AT Instruction	Web Server/Serial Port AT Instruction
Data Access	RS485/422, Remote Server	Serial Port/WiFi Point to Point/Remote Server
Status	LED x4	
Electrical Parameters		
Input Voltage	DC 5V(+/-5%)	DC 5V
Static Power Consumption	<2W	<1.6W
Max. Instantaneous Power Consumption	3W	<2.5W
Environmental Parameters		
Working Temperature	-25°C~+65°C	-10°C~+65°C
Working Humidity	10-90% (No Condensation)	
Storage Temperature	-25°C~+65°C	-10°C~+65°C
Storage Humidity	<40%	
Protection Class	IP21	
Physical Parameters		
Dimension(L*W*H)	110mm*80mm*24mm	110mm*80mm*26mm
Others		
Installation	Wall-Hanging/Flatwise	110mm*80mm*26mm



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	Bluetooth	APP/Web	AT + Instruction Set Remote server 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