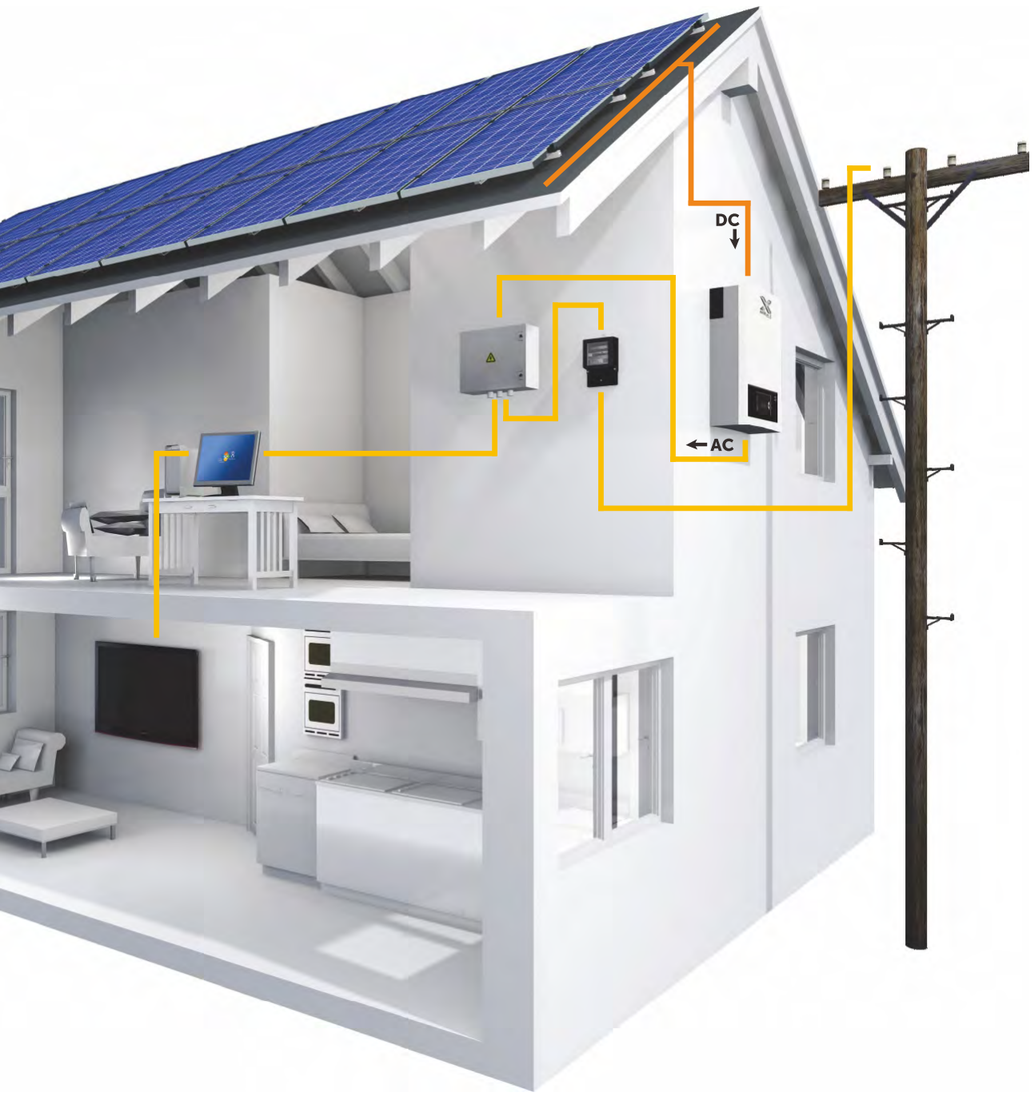
Engineered For Solar

TECHNEA duurzaam

Technea Duurzaam • Pallasweg 13 • 8938 AS Leeuwarden
T 058 - 288 79 14 • **E** info@energieonafhankelijk.nl • **I** www.energieonafhankelijk.nl

SolaX Inverter
PRODUCT BROCHURE



THE SOLAX INVERTER

The solar inverter is a critical technological component that is the heart of any PV plant. A solar inverter, or PV inverter, converts the variable directcurrent (DC) output of a photovoltaic (PV) solar panelinto a utility frequency alternating current (AC) thatcan be stored or fed into a commercial electrical grid,allowing the use of ordinary commercial appliances.At SolaX we are creating the inverters of tomorrow.

Our state-of-the-art facilities include an SMT machine, automatic plug in line and our TÜV testing laboratory.

ABOUT SOLAX POWER

A division of the Suntellite Group, our vision is to be a world leader in the development, production and sales of inverters that incorporate innovative technologies and state of the art capabilities, providing our customers the power to harvest nature's energy.

To create this technology we have employed more than 80 professors and senior engineers at our state of the art 240,000m2 production facility, that boasts over USD$20,000,000 of investment in professional equipment, including our SMT machine, automatic plug in line and our TüV testing laboratory.
A company lead by innovation that is based on research, SolaX Power is proud to be affiliated with the Zhejiang University, currently ranked third amongst the best universities in China and home to the only national key silicon material laboratories

Zhejiang University

With this level of investment and innovation, SolaX products are designed, tested and manufactured to the highest global standards. Proudly supported by 16 international offices with 24-hour, 7 days per week online service, our products are exported to 47 countries via 200 distribution channels.
SolaX products come with international module certifications such as TüV, CE, SAA, UL, MCS, ROHS and inverter certificates, VDE, SAA, EN50438, G83, G59, C10/11.

As a brand committed to the responsibility of "planting a greener future" for you and your family, we have built a world class production facility with a leading professional research and development team. Our commitment is to supply to our customers a more advanced, reliable, safer and cost-effective range of PV products and energy system solutions, that are engineered to meet the world's growing energy demands.

GREENER FUTURE
GLOBAL STANDARDS
INNOVATIVE TECHNOLOGIES

X1

SOLAX SOLAR INVERTER

SL-TL1500 / 2200 / 2800 / 3000 / 3600

High efficiency and long time working

SINGLE PHASE

High performance

- MPPT efficiency up to 99.9%
- Maximum efficiency up to 97.6%
- Maximum DC input voltage of 580V
- Wide MPPT voltage range allows more energy harvesting

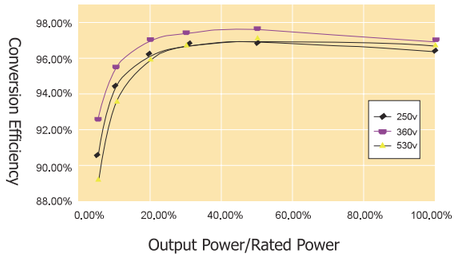
Flexibility and reliability

- Lower starting voltage and longer working time
- Fanless, quiet and low maintenance-free
- High protection class IP65 (indoor/outdoor use)
- Multiple protections: RCD, isolation, over voltage, and earth protection,etc

User-friendly

- Multi-lingual display
- Backlight 16 x 2 characters LCD
- RS485, WIFI and 3G (optional) communication for monitoring
- "Plug and play" connection for easy installation and maintenance

Efficiency Curve



Technical Data

Inverter Model	SL-TL 1500	SL-TL 2200	SL-TL 2800	SL-TL 3000	SL-TL 3600
➤ Input(DC)					
Max.recommended DC power[W]	1700	2300	3000	3200	4000
Max. starting DC voltage [V]	580	580	580	580	580
Max. input current [A]	10	12	13.8	15	17
MPPT voltage range [V]	125-530	125-530	125-530	125-530	125-530
Min. DC voltage/start voltage [V]	70/100	70/100	70/100	70/100	70/100
Number of MPP trackers/strings per MPP tracker	1/1	1/1	1/2	1/2	1/2
➤ Output(AC)					
AC nominal power [W]	1500	2000	2600	3000	3680
Max. AC power [W]	1650	2200	2800	3000	3680
Nominal AC voltage; range [V]	220/230/240; 180-280				207-264(G83/2)
AC grid frequency; range [Hz]	50/±5				47-50.5(G83/2)
Max. AC current [A]	7.5	10	13	13.2	16
Power factor (full load)	>0.99	>0.99	>0.99	>0.99	>0.99
Total harmonic distortion (THD)	<3%	<3%	<3%	<3%	<3%
➤ Efficiency					
MPPT efficiency	99.9%	99.9%	99.9%	99.9%	99.9%
Euro-efficiency	96.5%	96.8%	96.9%	96.9%	97.1%
Max. efficiency	97.4%	97.5%	97.6%	97.6%	97.6%
➤ Power consumption					
Input standby power [W]	3.5	3.5	3.5	3.5	3.5
Internal consumption (night) [W]	0	0	0	0	0
➤ Safety and protection					
Internal overvoltage protection	Yes				
DC insulation monitoring	Yes				
Grid monitoring	Yes				
Earth fault current monitoring	Yes				
DC current monitoring	Yes				
Islanding protection	Yes				
RCD protection	Yes				
➤ Environment limits					
Protection class	IP65				
Operating temperature range [°C]	-20~60 (derating at 45)				
Humidity [%]	0~95 (non-condensing)				
Altitude [m]	2000				
Storage temperature [°C]	-20~60				
Noise emission (typical) [dB]	<30				
➤ Dimensions and weight					
Dimensions (WxHxD) [mm]	376 x 437 x 143				
Weight [Kg]	16	16	16.5	16.5	16.5
Cooling concept	Convection				
Topology	Transformer-less				
Communication interfaces	RS485/RS232 (WIFI standard)				
LCD display	Backlight, 16x2 character LCD				
Standard warranty [years]	10				

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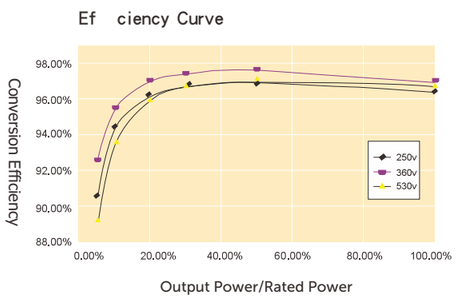
SOLAX SOLAR INVERTER

SL-TL3300T / 3600T / 4400T / 5000T LCD display

High efficiency and wider usage



SINGLE PHASE DUAL MPPT

High performance

- MPPT efficiency up to 99.9%
- Maximum efficiency up to 97.6%
- Maximum DC input voltage of 580V
- Dual MPP tracker and wide MPPT voltage range for more flexibility
- Configuration and higher yield

Flexibility and reliability

- Lower starting voltage and longer working time
- Fanless, quiet and low maintenance-free
- High protection class IP65 (indoor/outdoor use)
- Multiple protections: RCD, isolation, over voltage, and earth protection,etc

User-friendly

- Multi-lingual display
- Backlight 16 x 2 characters LCD
- RS485, WIFI and 3G (optional) communication for monitoring
- "Plug and play" connection for easy installation and maintenance

Technical Data

Inverter Model	SL-TL3300T	SL-TL3600T	SL-TL4400T	SL-TL5000T
➤ Input (DC)				
Max. recommended DC power [W]	3480	4000	4580	5200
Max. starting DC voltage [V]	580	580	580	580
Max. input current [A]	17/17	17/17	18/18	20/20
MPPT voltage range [V]	125-530	125-530	125-530	125-530
Min. DC voltage/start voltage [V]	70/100	70/100	70/100	70/100
Number of MPP trackers/strings per MPP tracker	2/A:1 B:1	2/A:1 B:1	2/A:1 B:1	2/A:1 B:1
➤ Output (AC)				
AC nominal power [W]	3000	3680	4000	4600
Max. AC power [W]	3300	3680	4400	5000
Nominal AC voltage; range [V]	220/230/240; 180-280	207-264 (G83/2)	220/230/240; 180-280	220/230/240; 180-280
AC grid frequency; range [Hz]	50/±5	47-50.5 (G83/2)	50/±5	50/±5
Max. AC current [A]	15	16	20	23
Power factor (full load)	>0.99	>0.99	>0.99	>0.99
Total harmonic distortion (THD)	<3%	<3%	<3%	<3%
➤ Efficiency				
MPPT efficiency	99.9%	99.9%	99.9%	99.9%
Euro-efficiency	97.1%	97.1%	97.2%	97.2%
Max. efficiency	97.6%	97.6%	97.6%	97.6%
➤ Power consumption				
Input standby power [W]	3.5	3.5	3.5	3.5
Internal consumption (night) [W]	0	0	0	0
➤ Safety and protection				
Internal overvoltage protection	Yes			
DC insulation monitoring	Yes			
Grid monitoring	Yes			
Earth fault current monitoring	Yes			
DC current monitoring	Yes			
Islanding protection	Yes			
RCD protection	Yes			
➤ Environment limits				
Protection class	IP65			
Operating temperature range [°C]	-20~60 (derating at 45)			
Humidity [%]	0~95 (non-condensing)			
Altitude [m]	2000			
Storage temperature [°C]	-20~60			
Noise emission (typical) [dB]	<30			
➤ Dimensions and weight				
Dimensions (WxHxD) [mm]	435x595x145			
Weight [Kg]	21.5	22	22	22
Cooling concept	Convection			
Topology	Transformer-less			
Communication interfaces	RS485/RS232 (WIFI standard)			
LCD display	Backlight, 16x2 character LCD			
Standard warranty [years]	10			

X1
NEW

SOLAX SOLAR INVERTER

X1-LX2200 / 3300 / 3600 / 4600 / 5200

Export Control & Cable Monitoring

SINGLE PHASE DUAL MPPT

High performance

- High MPPT efficiency up to 99.9%
- Max DC to AC efficiency up to 97.6%
- Dual MPP tracker can work either independently or parallel.
- Wide MPPT working range.

Flexibility and reliability

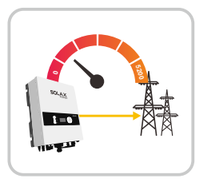
- Fanless design, quiet , low maintenance and long life span.
- High protection class IP65 for indoor and outdoor use.
- Easy installation, hang and fix, no need to align to the hole.
- Power factor adjustable.
- Export control, no impact to the grid
- Load control function (with an optional I/O card and sockets) reducing the energy cost.

User-friendly

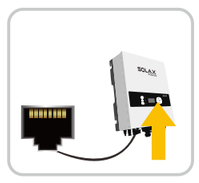
- Integrated DC switch.
- Integrated WIFI function and free monitoring system.
- Professional settings with multilayer password management.
- Easy upgrading via the ethernet port.

Load Remote Control

Internal WIFI &
Remote Monitoring



Export Control
to the Grid



Easy Upgrading Via
Ethernet Port

Technical Data

Model	X1-LX 2200	X1-LX 3300	X1-LX 3600	X1-LX 4600	X1-LX 5200
▸ Input(DC)					
Max. DC input power [W]	2200	3300	4000	4600	5200
Max. PV voltage [V]			550		
Rated input voltage [V]			360		
Max. DC input current per input [A]	12	12	12/12	12/12	12/12
Max. DC short-circuit per input [A]	15	15	15/15	15/15	15/15
MPPT voltage range [V]	125-530	125-530	125-530	125-530	125-530
Start input voltage [V]	100	100	100	100	100
Output voltage [V]	70	70	70	70	70
No. of MPPT inputs	1	1	2	2	2
No. of strings per MPPT input	1	1	1	1	1
DC disconnection switch			Optional		
▸ Output (AC)					
Rated output power [W]	2000	3000	3680	4200	4600
Rated grid voltage range [V]			220/230/240 (180 to 280)		
Rated grid frequency [Hz]; range [Hz]			50 (45 to 55) / 60 (55 to 65)		
AC nominal current [A]	10	14	16	19	21
Max. output current [A]	12	16	16	21	23
Total harmonic distortion [THD]			<3%		
Maximum output overcurrent protection			25A		
Displacement power factor, adjustable			0.9 leading to 0.9 lagging		
Feed in phase			Single-phase		
Over voltage category			III (electric supply side), II (PV side)		
▸ Efficiency					
MPPT efficiency	99.9%	99.9%	99.9%	99.9%	99.9%
Euro-efficiency	97.0%	97.0%	97.0%	97.0%	97.0%
Max. efficiency	97.6%	97.6%	97.6%	97.6%	97.6%
▸ Safety and Protection					
Over voltage/under voltage protection			Yes		
DC isolation impedance monitoring			Yes		
Grid monitoring			Yes		
Ground fault current monitoring			Yes		
DC injection monitoring			Yes		
Residual current detection			Yes		
Anti-islanding protection			Yes		
Over heat protection			Yes		
▸ Others					
Dimension (W/H/D) [mm]			384 x 462 x 152.5		
Dimension of packing (W/H/D) [mm]			504 x 614 x 234		
Weight [kg]			17		
Gross weight [kg]			20		
Cooling concept			Natural cooling		
Noise emission			<25 dB		
Operating temperature range [℃]			-20~+60 (derating at 45)		
Store temperature [℃]			-20~+60		
Max. permissible relative humidity (non-condensing)			0%~90%		
Altitude [Km]			<2000		
Degree of protection			IP65		
Topology			Transformer-less		
Internal consumption [W]			<3		
LCD display			Backlight 16*4 character		
Communication interface			Ethernet / WIFI / Dry contact / I/O(optional) / Smart meter		
Standard warranty			Standard 10 years		

X3

SOLAX SOLAR INVERTER

ZDNY-TL10000 / 12000 / 15000 / 17000 / 20000

Optimised three phase inverter

THREE PHASE DUAL MPPT

High performance

- MPPT efficiency up to 99.9%
- Maximum efficiency up to 98.2%
- Maximum DC input voltage of 1000V
- Photon Double A rated
- Dual MPP tracker and wide MPPT voltage range for more flexibility
- Configuration and higher yield

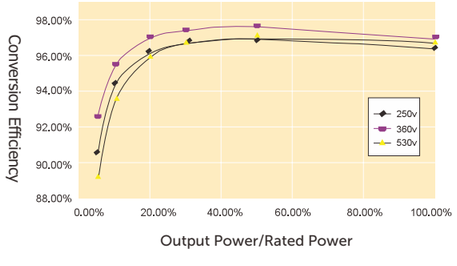
Flexibility and reliability

- Integrated DC switch
- Temperature controlled fan
- High protection class IP65 (indoor/outdoor use)
- Multiple protections: RCD, isolation, over voltage, and earth protection, etc

User-friendly

- Multi-lingual display
- Graphic LCD display
- RS485, WIFI(Optional) and 3G (optional) communication for monitoring
- "Plug and play" connection for easy installation and maintenance

Efficiency Curve



Technical Data

Inverter Model	ZDNY-TL10000	ZDNY-TL12000	ZDNY-TL15000	ZDNY-TL17000	ZDNY-TL20000
➤ Input (DC)					
Max. recommended DC power [W]	10260	12300	15370	17420	20500
Max. starting DC voltage [V]	1000	1000	1000	1000	1000
Max. input current [A]	A:22/B:11	A:22/B:11	A:22/B:22	A:22/B:22	A:22/B:22
MPPT voltage range [V]	320-800	380-800	350-800	400-800	400-800
Min. DC voltage/starting voltage [V]	220/250	220/250	220/250	220/250	220/250
Number of MPP trackers/strings per MPP tracker	2/A:3 B:1	2/A:3 B:1	2/A:3 B:3	2/A:3 B:3	2/A:3 B:3
➤ Output (AC)					
AC nominal power [W]	10000	12000	15000	17000	20000
Max. AC power [W]	10000	12000	15000	17000	20000
Nominal AC voltage; range [V]	3/N/PE 230/400; 160-280				
AC grid frequency; range [Hz]	50; 44-55				
Max. AC current [A]	16	20	24	25	29
Power factor (Full load)	0.9 leading...0.9 lagging				
Total harmonic distortion (THD)	<3%	<3%	<3%	<3%	<3%
➤ Efficiency					
MPPT efficiency	99.9%	99.9%	99.9%	99.9%	99.9%
Euro-efficiency	97.6%	97.6%	97.6%	97.6%	97.6%
Max. efficiency	98.2%	98.2%	98.2%	98.2%	98.2%
➤ Power consumption					
Input standby power [W]	<10	<10	<10	<10	<10
Internal consumption (night) [W]	<1	<1	<1	<1	<1
➤ Safety and protection					
DC disconnect device	Yes				
Internal overvoltage protection	Yes				
DC current/insulation monitoring	Yes/Yes				
Grid monitoring/Earth fault monitoring	Yes/Yes				
Islanding protection	Yes				
RCD protection	Yes				
Protection class(IEC62103)/overvoltage category (IEC60664-1)	I/III				
➤ Environment limits					
Protection class	IP65 (IP54 for fan)				
Operating temperature range [°C]	-20~60 (derating at 45)				
Humidity [%]	0~95 (non-condensing)				
Altitude [m]	2000				
Storage temperature [°C]	-20~60				
Noise emission (typical) [dB]	<50				
➤ Dimensions and weight					
Dimensions (WxHxD) [mm]	513 x 651.5 x 207				
Weight [Kg]	48	48	50.5	50.5	51
Cooling concept	Temperature controlled fan				
Topology	Transformer-less				
Communication interfaces	RS485/RS232/Dry contact (WIFI,3G optional)				
LCD display	Graphic LCD				
Standard warranty [years]	10				

USE ENERGY, STORE IT,

OR FEED IT INTO THE GRID,

IT IS NOW POSSIBLE WITH X-HYBRID.

Achieve your independence from traditional power providers considering the intelligent SolaX Hybrid Series with charger.

As we know, Solar panels generate the most energy during the day when the sun is shining and when you and your family tend to use the least energy or have the lowest consumption levels.

With ongoing increases in energy prices and the continual decrease of the feed-in tariff, you must make the most out of your solar energy. Our X-Hybrid 'Self-use Energy Storage System' is the perfect solution to solve this problem and to get the most out of your solar energy both today and into the future. Our Hybrid solution makes it possible to utilise solar power time-independently by storing unused capacity. It converts and directs solar power to where it is needed, when it is needed.

SK-TL3000/SK-TL3700/SK-TL5000 (e) **WITH CHARGER**

SK-SU3000/SK-SU3700/SK-SU5000 (e)

X HYBRID SERIES

Hybrid Ready Inverter

SK-TL3000 / SK-TL3700 / SK-TL5000 (e)

Prepare for energy independence by using this premium quality hybrid ready grid connect inverter. This unit gives you the opportunity to monitor property loads over time and evaluate your energy usage patterns.

Self-Use Hybrid Inverter

SK-SU3000 / SK-SU3700 / SK-SU5000 (e)

The SU series of hybrid inverter includes 1 built-in battery manager unit and solar MPPT. This unit is extremely flexible and can be simply upgraded to support multiple battery banks by adding additional battery units. This intelligent hybrid inverter provides a full solution for energy consumers to maximize the use of their generated solar energy and minimize their energy bills.

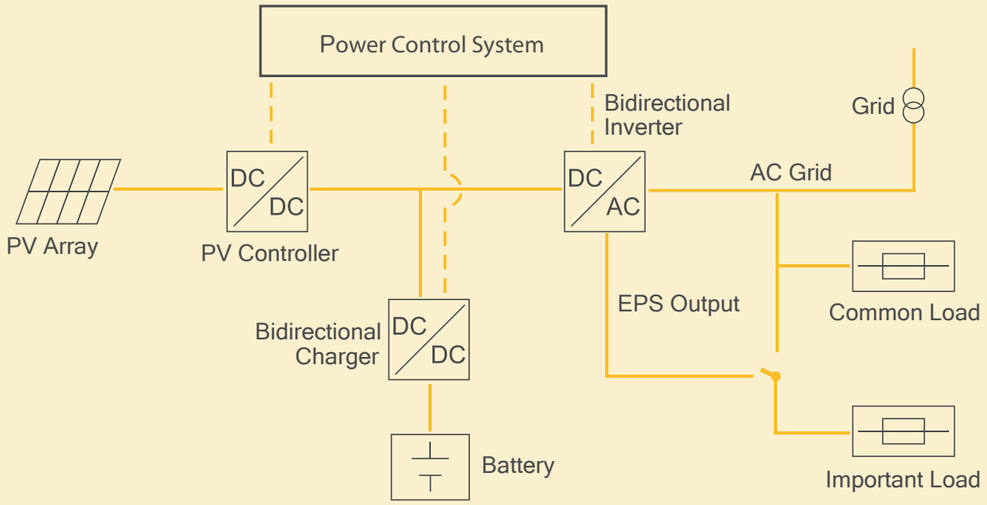
Emergence Power Supply
Power your home during grid outage

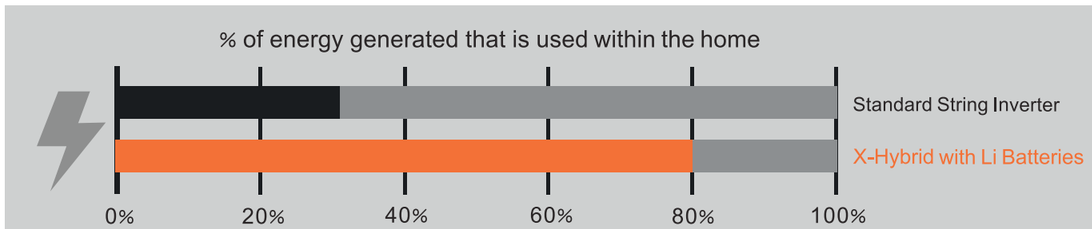
EPS

HYBRID WORKING THEORY

X-Hybrid Self-use Energy Storage System converts DC electricity generated by solar panels to AC electricity for grid and load to DC for the battery.

The electricity will be provided for load first, and the excessive electricity will be stored in the battery, after the battery is fully charged, the electricity will be fed into the grid. Once the power goes down, the CT sensor will alert the EMS and activate the Emergency Power Supply (EPS) to ensure the energy from the panels and batteries can be used to power the home.





X-HYBRID ADVANTAGES

COMPARED TO TRADITIONAL GRID-TIED SOLAR SYSTEM

- Save money on your power bills by increasing the proportion of self-use electricity generated by your solar system from 30% to more than 80%.
- Save money by becoming independent from ever increasing energy prices.
- Reduce stress on the grid by reducing your solar power feed.
- Manage property consumption and generation remotely via built-in CT & WIFI monitoring solution.

COMPARED TO OTHER BRANDS

Reliable

- European and American and Japanese made key components.

Efficient

- Highly effective solar power utilisation and long battery life by intelligent designed charging module.

User-friendly

- Intelligent man-machine interaction mode.

X-Hybrid Solar Inverter (City Solution)

Model	SK -TL 3000c	SK -TL 3700c	SK -TL 5000c
➤ Input (DC)			
Max. recommended DC power [W]	3300	4000	5000
Max. DC voltage [V]		550	
Nominal DC operating voltage [V]		360	
MPPT voltage range [V]		125-530	
Max. input current [A]	12	12/12	12/12
Max. short circuit current [A]	15	15/15	15/15
Number of MPP trackers	1	2	2
Strings per MPP tracker	1	1	1
➤ Output (AC)			
AC nominal power [W]	3000	3680	4600
Nominal AC voltage; range [V]		230VAC 50/60HZ; 180~270VAC	
AC nominal current [A]	13	16	20
Max. AC current [A]	14.4	16	22.1
Total harmonic distortion (THD)		<3%	
Power factor (rated power)		1	
Displacement power factor		0.9 leading...0.9 lagging	
➤ Efficiency			
MPPT efficiency	99.9%	99.9%	99.9%
Euro-efficiency	97.0%	97.0%	97.0%
Max. efficiency	97.6%	97.6%	97.6%
Standby losses		<3W	
➤ Display			
LCD		Backlight 16*4 character	
Communication interfaces		Ethernet/Dry contact /WIFI	
LED light		4	
Button		4	
➤ Others			
DC switch		Optional	
Max. No. of supported external charger		1	
Operating temperature range [°C]		-10~+50 (derating at 40)	
Storage stability range [°C]		-20~+60	
Altitude [m]		<2000	
Cooling concept		Forced airflow	
Noise emission (typical) [dB]		<40	
Humidity [%]		0~95 (non-condensing)	
Protection class		IP20 (for indoor use)	
Overvoltage category		III (electric supply side), II (PV side)	
EMC standard		IEC61000-6-1/2/3/4	
Topology		Transformer-less	
Warranty		Standard 7 years	
Dimensions (W /H / D) [mm]		490 x 595 x 167	
Weight [kg]		23.5	
Certificate		Germany, Australia,Belgium, Netherlands, Denmark, Austria,UK,Italy	

X-Hybrid Solar Inverter (Backup Solution)

Model	SK -TL 3000e	SK -TL 3700e	SK -TL 5000e
➤ EPS only with external charger (with external max. 100A charger)			
EPS rated power [VA]	3000	3680	4600
EPS rated voltage, Frequency		230VAC 50/60HZ	
EPS rated current [A]	13	16	20
EPS peak power [VA]	1.5xPrated, 10s	1.5xPrated, 10s	1.5xPrated, 10s
Total harmonic distortion (THD)		<3%	
Swtich time		<5s	

X-Hybrid Solar Inverter For Self-Use (City Solution)

Model	SK-SU3000c	SK-SU3700c	SK-SU5000c
➤ Input (DC)			
Max. recommended DC power [W]	3300	4000	5000
Max. DC voltage [V]		550	
Norminal DC operating voltage [V]		360	
MPPT voltage range [V]		125-530	
Max. input current [A]	12/12	12/12	12/12
Max. short circuit current [A]	15/15	15/15	15/15
Number of MPP trackers	1	2	2
Strings per MPP tracker	1	1	1
➤ Output (AC)			
AC nominal power [W]	3000	3680	4600
Nominal AC voltage; range [V]		230VAC 50/60HZ; 180~270VAC	
AC nominal current [A]	13	16	20
Max. AC current [A]	14.4	16	22.1
Total harmonic distortion (THD)		<3%	
Power factor (rated power)		1	
Displacement power factor		0.9 leading...0.9 lagging	
➤ Display			
Communication interfaces		Backlight 16*4 character	
LED light		Ethernet/Dry contact /WIFI	
Button		4	
LCD		4	

Table continued overleaf

X-Hybrid Solar Inverter For Self-Use (continued) (City Solution)

Model	SK-SU3000c	SK-SU3700c	SK-SU5000c
➤ Battery Charger (Inside)			
Compatible battery type		Lead-acid battery/lithium battery	
Battery nominal voltage [V]		48	
Battery voltage range [V]		40-58	
Battery capacity [KWh]		4.8	
Max. charging current [A]		50	
Charging curve		3-stage adaptive with maintenance	
Over-current protection/Over-temperature protection		YES	
Communication interfaces		Can/RS232	
➤ Charge			
Max. power [W]		2500	
Max. charge current [A]		50	
➤ Discharge			
Max. power [W]		2500	
Max. discharge current [A]		50	
Depth of discharge		80% for lithium battery 50% for lead-acid battery (adjustable)	
➤ Efficiency			
MPPT efficiency	99.9%	99.9%	99.9%
Euro-efficiency	97.0%	97.0%	97.0%
Max. efficiency	97.6%	97.6%	97.6%
Standby losses		<3W	
➤ Others			
DC switch		Optional	
Max. No. of supported external charger		0	
Operating temperature range [°C]		-10~+50 (derating at 40)	
Storage stability range [°C]		-20~+60	
Altitude [m]		<2000	
Cooling concept		Forced airflow	
Noise emission (typical) [dB]		<40	
Humidity [%]		0~95 (non-condensing)	
Protection class		IP20 (for indoor use)	
Overvoltage category		III (electric supply side), II (PV side)	
EMC standard		IEC61000-6-1/2/3/4	
Topology		Transformer-less	
Warranty		Standard 5 years	
Dimensions (W /H / D) [mm]		680 x 595 x 167	
Weight [kg]		32	
Certificate		Germany, Australia,Belgium, Netherlands, Danmark, Austria, UK,Italy	

X-Hybrid Solar Inverter For Self-Use (Rural Solution)

Model	SK-SU3000e	SK-SU3700e	SK-SU5000e
➤ EPS with internal charger			
EPS rated power [VA]	2500	2500	2500
EPS rated voltage, Frequency		230VAC 50/60HZ	
EPS rated current [A]	11	11	11
EPS peak power [VA]	1.5×Prated, 10s	1.5×Prated, 10s	1.5×Prated, 10s
Total harmonic distortion (THD)		<3%	
Swtich time		<5s	

HYBRID
SERIES

SOLAX SOLAR CHARGER

SK-BMU1300 / 2500 / 5000

The SolaX battery manager can be used with SK-TL series inverter for extending the battery capability of self use. Three options gives your flexibilities when build up your own energy storage system.

SK-BMU1300/2500

SK-BMU5000

X-Hybrid Battery Manager Unit

Model	SK-BMU1300	SK-BMU2500	SK-BMU5000
➤ Battery Manager			
Battery type	Lead-acid battery/lithium battery		
Battery nominal voltage [V]	48		
Battery voltage range [V]	40-65		
Battery capacity [KWh]	4.8	10	20
Max. charging current [A]	25	50	100
Charging curve	3-stage adaptive with maintenance		
Over-current protection/Over-temperature protection	Yes	Yes	Yes
Communication interfacess	Can/RS232	Can/RS232	Can/RS232
➤ Charge			
Max. power [W]	1300	2500	4600
Max. charge current [A]	25	50	100
➤ Discharge			
Max. power [W]	1300	2500	4600
Max. discharge current [A]	25	50	100
Depth of discharge	80% for lithium battery 50% for lead-acid battery (adjustable)		
➤ Others			
Operating temperature range [°C]	-10~+50 (derating at 40)		
Storage stability range [°C]	-20~+60		
Altitude [m]	<2000		
Cooling concept	Forced airflow		
Noise emission (typical) [dB]	<40		
Humidity [%]	0~95 (non-condensing)		
Protection class	IP20 (for indoor use)		
EMC standard	IEC61000-6-1/2/3/4		
Warranty	Standard 7 years		
Dimensions (W /H / D) [mm]	289 x 595 x 167		460 x 595 x 167
Weight [kg]	13		23
Certificate	Germany, Australia,Belgium, Netherlands, Danmark, Austria, UK,Italy		
Protection (Fuse internal)	40A	80A	120A
Battery reverse polarity protection	Yes		
Battery anti-shock design	Yes		

Lithium storage

• Lithium Battery

• Lithium Battery Cabinet

BEST PRODUCT FOR HOME ENERGY STORAGE

Fastest ROI

- Larger charging pipeline consumes all energy generated by PV
- Deeper DoD to save and use more energy
- Superb life cycles ensure the lowest cost per Wh.time

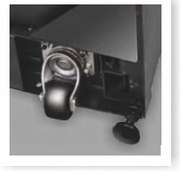
Designed for home usage

- Smaller footprint, superior aesthetics, minimal maintenance
- Modular design for easy installation and product swap
- Less temperature sensitivity, can be put indoor or outdoor

Designed for safety

- Natural olive structure, hardly catching fire even in severe environment
- Multiple layer protection method to ease any current/voltage/temperature risk Intelligent BMS report and alarm any abnormal status in real time

Material of the cabinet is cold rolled plate



Material for wheels are rubber with stainless stabilizer

Lithium Battery

Basic Parameters	Extra2000
Life span (25°C/77°F)	10 years
Life span (40°C/122°F)	8 years
Life cycles (80%DOD, 25°C/77°F)	≥4000
Maintenance	Free in quality guaratee period
Backup duration (Average Power 500W)	≥5h
Storage time (25°C/77°F)	6 Months power off
Operation temperature	-25°C~60°C(-13°F~77°F)
Storage temperature	-40°C~80°C(-40°F~176°F)
Seismic standard	GR-1089
Transport standard	UN 3090
EMC standard	IEC 61000, EN 55022
Environmental standard	GB/T 2423
The authentication level	TUV, CE, CCC, TLC5

➤ Nominal Parameters

Voltage [V]	48
Capacity [Ah]	50
Capacity [Wh]	2400

➤ Structural Parameters

Height [mm]	120(3U)
Length [mm]	422
Width [mm]	370
Weigth [Kg]	28±05

➤ Electrical Parameters

Operating voltage [V]	42~54
Charge voltage [V]	53.5~56.5
Maximum discharge current [A]	50

➤ Communication Parameters

Network interface	ZARS232
Communication protocols	YD/T 1363.3-2005

Lithium Battery Cabinet

MODEL	SIZE LxWxH(mm)	CARTON MEASUREMENT LxWxH(mm)	VOLUME/CBM	NO. OF WHEELS	NO. OF HOLDERS	MAX. LOAD(KG)
XLB09 (9U)	450x600x501	520x670x560	0.2	0	0	1000
XLB18 (18U)	600x600x988	630x630x1050	0.4	4	4	1000

Note:

1. U is the standard unit of measure for designating the vertical usable space, or height of racks (metal frame designed to hold hardware devices) and cabinets (enclosures with one or more doors). This unit of measurement refers to the space between shelves on a rack. 1U is equal to 1.75 inches. For example, a rack designated as 20U, has 20 rack spaces for equipment and has 35 (20 x 1.75.) inches of vertical usable space. Rack and cabinet spaces and the equipment which fit into them are all measured in U.
2. Size of battery cabinet depends on the No. of Li batteries. 1 Li battery is 3U, so 22U supports up to 22/3≈7 Li batteries, and so on.

Lead-acid storage

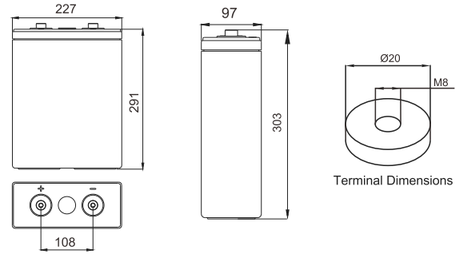
• Lead-acid Battery

• Lead-acid Battery Cabinet

LEAD-ACID STORAGE

- Long life design for both cyclic and float application
- Superb security and reliability
- Reasonable design creates robust structure
- Excellent performance of deep discharge recovery and fast recharge
- Extra long back-up time
- More cost effective than nearest equivalent
- Designed for compliance with IEC61427, IEC60896-21/-22, etc.

Dimensions(mm)



Lead-acid Cabinet

SIZE L x W x H(MM)	NO. OF WHEELS	NO. OF HOLDERS	MAX. LOAD(KG)
110 x 45 x 100	0	0	600

Note:

1. Cold rolled plate material.
2. 1 cabinet is designed for 1 group of Lead-acid batteries.

Technical specifications

Electrical Data	
Nominal voltage	2V
Number of cells	1
Rated capacity (25°C)	200Ah-20A for 10h to 1.80V/cell 240Ah-2A for 120h to 1.85V/cell
Life cycles	≥2600
Internal resistance	0.55mΩ(acc. to IEC 60896-21)
Short circuit current	3700A (acc. to IEC 60896-21)
Self discharge (25°C)	Less than 2% per month
Designed life at 25°C	20 years

Mechanical Data	
Weight ready for use	17.5kg (39.7ibs)
Length	227mm (8.94in)
Width	96mm (3.78in)
Height of monobloc	291mm (11.93in)
Total height	303mm (11.93in)
Terminal	M8 female
Terminal hardware torque	10-12 Nm

Construction	
Positive plate	Reinforced grids in a corrosion-resistant pure lead, high tin, low calcium alloy
Negative plate	Lead-calcium alloy grid
Separator	High density microporous glass mat with low electrical resistance
Container & lid	High strength ABS(HB). Optional flame retardant versions available(UL94FV-0 with L.O.I. of 28%)
Electrolyte	Sulphuric acid with a density of 1.28g/ml absorbed in AGM
Terminal design	Patented leak resistant seal configuration with brass insert
Safety valve	Calibrated opening pressure, the valve equipped with flame arrestors for increased operational safety and service life

Installation and operation	
Recommended float charge voltage	2.27V per cell at 25°C
Compensation in function of temperature	-3mV/°C/cell
Cycle and equalize charge voltage	2.35V per cell at 25°C
Compensation in function of temperature	-5mV/°C/cell
CC-CV charge current	Unlimited, otherwise 50A max, if T>25°C
Preferred operating temperature range	15°C to 25°C (68°F to 77°F)
Maximum operating temperature range	-40°C to 50°C (-40°F to 122°F)
A separate battery room	Not necessary
Reduced maintenance	No water addition required

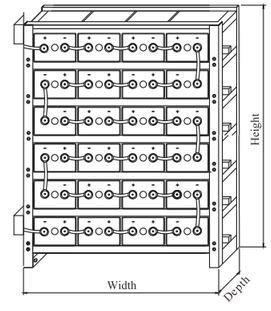
Racking (optional)

SolaX racks are constructed using strong, easy to assemble, powder-coated steel tubing and come complete with sliding cover terminal (take-off) plates.

Cell model:REX-200 Number of cells: 24 System Voltage: 48

Cell Configuration	4 rows 6 columns	6 rows 4 columns	In coolstar cabinet
Rack width(mm)	1622	1048	Cabinet width(1200)
Rack depth(mm)	300	300	Cabinet depth(1450)
Rack height(mm)	624	886	Cabinet height(1500)
System weight(kg)	500	490	650

* Please allow 100mm for terminal boxes



X-MONITORING SYSTEM

- Daily/weekly/monthly report send to designated email address
- Batch inverters monitoring for installers and distributors
- 24 hours monitoring for Windows/Android/Apple devices

- Specially designed for energy storage system
- Trilingual: English, German and Chinese
- Easy data reading with vivid charts and graphs
- Capacity monitoring for each single battery

X-MONITORING SYSTEM

THEY CAN TALK!

	ZDNY-WE01-D
▸ General	
Max. number of inverters	1-64
Inverter communication	RS485/422/232
Remote communication	WIFI(802.11b/g/n)Ethernet
Max. communication range	<1km
Data collection intervals	5 minutes(Default)/1-15 minutes(Optional)
Memory	SD Card/EEPROM(Optional)

COMMON FEATURES FOR ALL MONITORING SYSTEMS

- Remote monitoring via SolaX Portal
- A variety of communication methods available, including Ethernet, WiFi, and 3G
- Quick installation and easy operation with "Plug & Play" function
- Storage of over 25 years
- Graphical display of PV system data on SolaX Portal
- Operational failures can be detected rapidly and transmitted via email or SMS
- Report of collected data and performance can be sent via email regularly free standard access to SolaX Portal for the entire service life of the PV system

ZDNY-WE01-D

How it works

1. You install the X app onto your mobile devices.
2. Operating within a 50 meter radius, the X app will then search and connect to the X inverter.
3. Once connected you can then easily monitor the inverter data via our X app and your mobile device.

WE MAKE IT SIMPLE

	ZDNY-WE01
▸ General	
Max. number of inverters	1-64
Inverter communication	RS485/422/232
Remote communication	WIFI(802.11b/g/n)Ethernet
Max. communication range	<1km
Data collection intervals	5 minutes(Default)/1-15 minutes(Optional)
Memory	SD Card/EEPROM(Optional)

* Xcloud is the brand name for our SolaX Server

ZDNY-WE01

How it works

1. Our inverters upload operational data to the Xcloud* via WIFI.
2. Xcloud collects and processes those data every 30 seconds.
3. You can then monitor the data by simply logging into a registered account via your PC, iPhone or Android device.

NO WIFI @ HOME? WE STILL HAVE 3G!

	ZDNY-G01
▸ General	
Max. number of inverters	1-64
Inverter communication	RS485/422/232
Remote communication	3G
Max. communication range	<1km
Data collection intervals	5 minutes(Default)/1-15 minutes(Optional)
Memory	SD Card/EEPROM(Optional)

* Xcloud is the brand name for our SolaX Server

ZDNY-G01

How it works

1. Our inverters upload operational data to Xcloud via a built-in 3G SIM card.
2. Xcloud collects and processes those data every 30 seconds.
3. You can then monitor the data by simply logging into a registered account via your PC, iPhone or Android device.

CHUBB

PRODUCT CERTIFICATES

CB | CE | SAA | DVE | TÜV SÜD | BUREAU VERITAS | G83

Certificates / Module	CE		Australia	UK		Germany		Greece	Belgium	France	Netherland	Czeche	Danmark	Slovenia	Bulgaria	Spain	Austria	China	Italy
	LVD	EMC	SAA	G83	G59	VDE0126	VDE4105	VDE0126	C10/11	UTE-15712	EN50438	EN50438	EN50438	EN50438	VDE0126	RD1699	OVE/ONORME 8001-4-712	CQC	CEI-021
SL-TL1500	√	√	√	√		√		√	√	√	√	√	√						
SL-TL2200	√	√	√	√		√		√	√	√	√	√	√						
SL-TL2500										√									
SL-TL2800	√	√	√	√		√		√	√	√	√	√	√						
SL-TL3000	√	√	√	√		√		√	√	√	√	√	√						
SL-TL3300T	√	√	√	√		√		√	√	√	√	√	√						
SL-TL3600T	√	√		√		√		√	√	√	√	√	√						
SL-TL4400T	√	√	√	√	√	√		√	√	√	√	√							
SL-TL5000T	√	√	√	√	√	√		√	√	√	√	√							
L1-LX2200	√	√	√			√	√												
L1-LX3300	√	√	√			√	√												
L1-LX3600	√	√	√			√	√												
L1-LX4600	√	√	√			√	√												
L1-LX5200	√	√	√			√	√												
ZDNY-TL10000	√	√	√		√	√	√	√	√	√	√	√	√	√	√	√		√	
ZDNY-TL12000	√	√	√		√	√	√	√	√	√	√	√	√	√	√	√		√	
ZDNY-TL15000	√	√	√		√	√	√	√	√	√	√	√	√	√	√	√		√	
ZDNY-TL17000	√	√	√		√	√	√	√	√	√	√	√	√	√	√	√		√	
ZDNY-TL20000	√		√		√	√	√											√	
SK-TL3000	√	√	√	√			√		√		√		√				√		
SK-TL3700	√	√	√	√			√		√		√		√				√		
SK-TL5000	√	√	√				√		√		√		√				√		
SK-SU3000	√	√	√	√			√		√		√		√				√		
SK-SU3700	√	√	√	√			√		√		√		√				√		
SK-SU5000	√	√	√	√	√		√		√		√		√				√		
SK-TL3000E/C/R	√	√	√	√			√		√		√		√				√		√
SK-TL3700E/C/R	√	√	√	√			√		√		√		√				√		√
SK-TL5000E/C/R	√	√	√	√			√		√		√		√				√		√
SK-SU3000E/C	√	√	√	√			√		√		√		√				√		√
SK-SU3700E/C	√	√	√	√			√		√		√		√				√		√
SK-SU5000E/C	√	√	√	√			√		√		√		√				√		√
SK-BMU1300	√	√	√	√			√		√		√		√				√		√
SK-BMU2500	√	√	√	√			√		√		√		√				√		√
SK-BMU5000	√	√	√	√			√		√		√		√				√		√

AT SOLAX

WE ARE CREATING THE INVERTERS OF TOMORROW