Energy of the Future, Today

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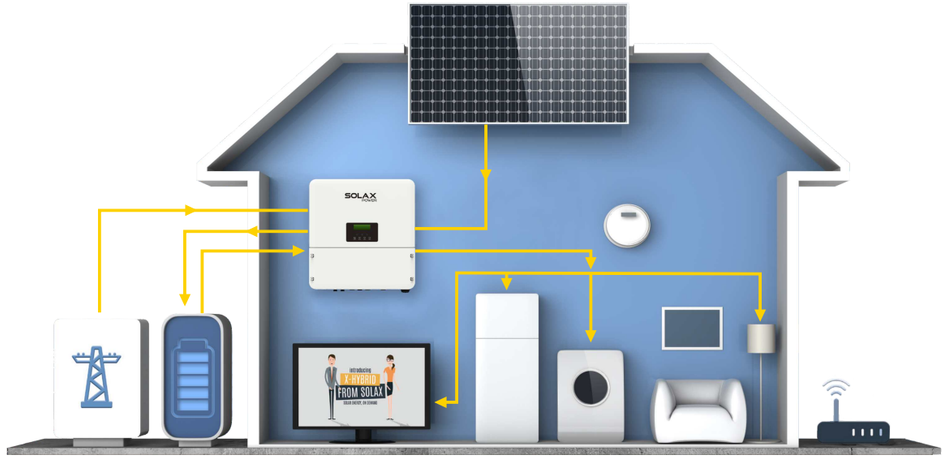
SOLAX
HYBRID INVERTER

ENERGY STORAGE SOLUTIONS

2019 Product Brochure

OUR VISION

The SolaX vision is to be a world leader in the development, production and distribution of solar inverters and batteries for energy storage. The product range incorporates the very latest in solar innovation thanks to the continued focus on R&D and unceasing commitment to pushing back the boundaries of what is possible – a journey that has led to the launch of the ground-breaking Hybrid inverters and batteries storage system.



Use More of Your Energy

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 ever increasing energy prices and the on-going phased feed-in tariff reductions, you must make the most out of your solar energy. The X-Hybrid is the heart of your optimised self-consumption system. It's an all-in-one device that manages your solar modules, batteries, electrical appliances and connection to the grid, giving you complete control of your energy and enabling you to use it as efficiently as possible.

For Everyone

Every household has its own energy requirements. That's why the X-Hybrid was developed to work with most of the market leading lithium-ion batteries available today in a range of sizes, enabling people to create a storage bank specifically tailored to their energy needs. With storage options ranging from 4.5 kWh to 25.2 kWh, the X-Hybrid will power a detached house, a multi-family house or a small apartment.

Stay Protected

Although electricity blackouts are rare and will usually only last for a few minutes, there is a risk of problems being created during the period of power outage. With the X-Hybrid's built-in Emergency Power Supply (EPS) you are protected during these power cuts. The X-Hybrid will supply your household with energy it has previously stored during these power failures ensuring important devices can stay powered until the power is restored.

Features:

- Increased self consumption
- Unbalanced output supported
- Multiple units in parallel
- Remote control function

SolaX Power is pleased to announce the launch of the X-Hybrid Three Phase commercial battery storage inverter. The 3-Phase includes inverters ranging in size from 5 to 10kW, and with the ability to install multiple inverters in parallel, scalable battery storage for commercial applications is now a reality. The inverter is equipped with a built-in EPS (Emergency Power Supply), has multiple communication options and can be controlled remotely.

X3-HYBRID HV (THREE PHASE)

	X3-HYBRID-5.0T	X3-HYBRID-6.0T	X3-HYBRID-8.0T	X3-HYBRID-10.0T
INPUT (DC)				
Max.PV array power [Wp]	A:3000/B:3000	A:4000/B:4000	A:6000/B:4000	A:8000/B:5000
Max.DC voltage [V]	1000	1000	1000	1000
Nominal DC operating voltage [V]	720	720	720	720
Max. input current (input A/input B) [A]	11/11	11/11	11/11	20/11
Max. short circuit current (input A/input B) [A]	14/14	14/14	14/14	23/14
MPPT voltage range[V]	200-950	200-950	200-950	200-950
Start operating voltage[V]	200	200	200	200
No. of MPP trackers	2	2	2	2
Strings per MPP tracker	A:1/B:1	A:1/B:1	A:2/B:1	A:2/B:1
INPUT AC				
Max. apparent AC power[VA]	5000	6000	7000	7000
Max. AC current[A]	8.0	9.6	11.2	11.2
Nominal grid voltage(AC voltage range)[V]	400/230;380/220	400/230;380/220	400/230;380/220	400/230;380/220
Nominal grid Frequency/range[Hz]	50/60	50/60	50/60	50/60
OUTPUT AC				
Nominal AC power [VA]	5000	6000	8000	10000
Max. apparent AC power [VA]	5000	6000	8000	10000
Nominal grid voltage(AC voltage range) [V]	400/230;380/220			
Nominal grid frequency/range [Hz]	50/60			
Nominal AC current [A]	7.2	8.7	11.6	14.5
Max. AC current [A]	8.0	9.6	12.8	16.0
Displacement power factor	0.8 leading ... 0.8 lagging			
THDi, rated power [%]	<3			
OUTPUT DC (BATTERY)				
Battery voltage range [V]	160-800			
Max.continuous charge/discharge current [A]	25			
Communication interfaces	CAN/RS485			
Reverse connect protection	Yes			
EPS OUTPUT (WITH BATTERY)				
EPS MAX. continuous apparent power [VA]	5000	6000	8000	10000
EPS rated voltage[V],Frequency [Hz]	400/230VAC;380/220VAC; 50/60			
EPS MAX.continuous current [A]	7.2	8.7	11.6	14.5
EPS peak apparent power [VA] Duration[s]	<10000 60	<12000 60	<14000 60	<15000 60
Changeover time [ms]	<500			
THDv, linear Load	<2			
EFFICIENCY				
MPPT efficiency [%]	99.9			
Euro efficiency [%]	97.0			
Max. efficiency [%]	97.8			
Battery charge/discharge efficiency [%]	97.0/96.0	97.0/96.0	97.5/96.5	97.5/96.5
POWER CONSUMPTION				
Standby consumption [W]	<7			
STANDARD				
Safety	IEC62109-1-2 / IEC62040			
EMC	EN61000-6-1/EN61000-6-2/EN61000-6-3			
Certification	VDE 0126-1-1 A1:2012 / VDE-AR-N 4105 / AS4777 / EN50438/ CEI 0-21/ G98/ G99/ G100			
ENVIRONMENT LIMIT				
Degree of protection(according to IEC60529)	IP65			
Operating temperature range [°C]	-20~+60 (derating at+45)			
Max. operation altitude [m]	2000			
Humidity [%]	0-100 (non-condersing)			
Storage temperature [°C]	-20~+60			
Typical noise emission [dB]	<40			
DIMENSION AND WEIGHT				
Dimensions(WxHxD) [mm]	457*654*228			
Weight[kg]	45			
Cooling concept	Natural			
Topology	Transformerless			
Communication interfaces	Ethernet/Meter/WIFI (optional)/DRM/USB-Upgrade			
LCD display	Backlight 20*4 character			
Standard warranty [years]	5-10			

X1-HYBRID HV (SINGLE PHASE)

	X1-HYBRID-3.0T	X1-HYBRID-3.7T	X1-HYBRID-4.6T	X1-HYBRID-5.0T
INPUT (DC)				
Max.PV array power [Wp]	4000	5000	6000	6000
Max.DC voltage [V]	600	600	600	600
Nominal DC operating voltage [V]	360	360	360	360
Max. input current (input A/input B) [A]	10/10	10/10	10/10	10/10
Max. short circuit current (input A/input B) [A]	14/14	14/14	14/14	14/14
MPPT voltage range[V]	125-550	125-550	125-550	125-550
Start operating voltage[V]	150	150	150	150
No. of MPP trackers	2	2	2	2
Strings per MPP tracker	1	1	1	1
INPUT AC				
Max. apparent AC power[VA]	3000	3680	4600	4999
Max. AC current[A]	14.4	16	21	21.7
Nominal grid voltage(AC voltage range)[V]	220/230/240(180-270)	220/230/240(180-270)	220/230/240(180-270)	220/230/240(180- 270)
Nominal grid Frequency/range[Hz]	50/60	50/60	50/60	50/60
OUTPUT AC				
Nominal AC power [VA]	3000	3680	4600	4999
Max. apparent AC power [VA]	3000	3680	4600	4999
Nominal grid voltage(AC voltage range) [V]	220/230/240(180-270)	220/230/240(180-270)	220/230/240(180-270)	220/230/240(180-270)
Nominal grid frequency/range [Hz]	50/60	50/60	50/60	50/60
Nominal AC current [A]	13	16	20	21.7
Max. AC current [A]	14.4	16	21	21.7
Displacement power factor	0.8 leading ... 0.8 lagging			
THDi, rated power [%]	<2			
OUTPUT DC (BATTERY)				
Battery voltage range [V]	85-400			
Recommended battery voltage[V]	300			
Max.continuous charge/discharge current [A]	20(adjustable)			
Communication interfaces	CAN/RS485			
Reverse connect protection	Yes			
EPS OUTPUT (WITH BATTERY)				
EPS MAX. continuous apparent power [VA]	4000	4000	5000	5000
EPS rated voltage[V],Frequency [Hz]	230, 50/60	230, 50/60	230, 50/60	230, 50/60
EPS MAX.continuous current [A]	21.7	21.7	26.0	26.0
EPS peak apparent power [VA] Duration [s]	6000 10	6000 10	8000 10	8000 10
Changeover time [ms]	<500			
THDv, linear Load	<2			
EFFICIENCY				
MPPT efficiency [%]	99.9			
Euro efficiency [%]	97.0			
Max. efficiency [%]	97.8			
Battery charge/discharge efficiency [%]	98.5 (PV-BAT) 97.0 (BAT-AC)			
POWER CONSUMPTION				
Standby consumption [W]	<3			
STANDARD				
Safety	IEC62109-1-2 / IEC62040			
EMC	EN61000-6-1/EN61000-6-2/EN61000-6-3			
Certification	VDE0126-1-1 A1:2012/VDE-AR-N4105/G98/G99/G100/AS4777/EN50438/CEI0-21/VDE2510			
ENVIRONMENT LIMIT				
Degree of protection(according to IEC60529)	IP65			
Operating temperature range [°C]	-20~+60 (derating at+45)			
Max. operation altitude [m]	2000			
Humidity [%]	4~100 (Condensing)			
Storage temperature [°C]	-20~+60			
Typical noise emission [dB]	<40			
DIMENSION AND WEIGHT				
Dimensions(WxHxD) [mm]	476*464*180			
Weight[kg]	24			
Cooling concept	Natural			
Topology	Transformerless			
Communication interfaces	Ethernet/Meter(optional)/WIFI (optional)/LAN(optional)/GPRS(optional)/DRM/USB-Upgrade			
LCD display	Backlight 20*4 character			
Standard warranty [years]	5-10			

X3-RETRO FIT (THREE PHASE)

Version: E,C
E:with EPS function
C:without EPS function

	X3-Fit-8.0		X3-Fit-10.0	
OUTPUT (AC)	**E** Version	**C** Version	**E** Version	**C** Version
Nominal AC power [VA]	8000	8000	10000	10000
Max. apparent AC power [VA]	8000	8000	10000	10000
Nominal grid voltage(AC voltage range) [V]	400V/230VAC;380/220VAC			
Nominal grid frequency/range [Hz]	50/60			
Nominal AC current [A]	11.6	11.6	14.5	14.5
Max. AC current [A]	12.8	12.8	16.0	16.0
Displacement power factor	0.8 leading to 0.8 lagging			
THDi, rated power [%]	<2			
INPUT AC				
Max. apparent AC power[VA]	7000	7000	7000	7000
Max. AC current[A]	11.2			
Nominal grid voltage(AC voltage range)[V]	400/230;380/220			
Nominal grid Frequency/range[Hz]	50/60			
OUTPUT DC (BATTERY)				
Battery voltage range [V]	160-800			
Max.continuous charge/discharge current [A]	25			
Communication interfaces	CAN/ RS485			
Reverse connect protection	YES			
EPS OUTPUT(WITH BATTERY)				
EPS MAX. continuous apparent power [VA]	8000	–	10000	–
EPS rated voltage[VAC],Frequency [Hz]	400/230;380/220 50/60	–	400/230;380/220 50/60	–
EPS MAX.continuous current [A]	11.6	–	14.5	–
EPS peak apparent power [VA] Duration [s]	12000 60	–	15000 60	–
Changeover time [ms]	<500	–	<500	–
THDv, linear Load	<2	–	<2	–
Changeover device	external	–	external	–
Three phases unbalanced	YES			
EFFICIENCY				
MPPT efficiency	99.9			
Euro efficiency	97.0			
Max. Battery charge efficiency (GRID to BAT)	97.6			
Max. Battery discharge efficiency (BAT to AC)	96.0			
POWER CONSUMPTION				
Internal consumption(night) [W]	<7			
SAFETY& PROTECTION				
Over/under voltage protection	Yes			
Monitoring ground fault protection	Yes			
Grid protection	Yes			
STANDARD				
Safety	IEC62477			
EMC	EN 61000-6-1 / EN 61000-6-2 / EN 61000-6-3			
Certification	VDE 0126-1-1 A1:2012 / VDE-AR-N 4105 / AS4777 / EN50438/ CEI 0-21/ G98/ G99/ G100			
ENVIRONMENT LIMIT				
Degree of protection(according to IEC60529)	IP65			
Operating temperature range [°C]	-20..... +60 (derating at +45)			
Max. operation altitude [m]	2000			
Humidity [%]	0~100 (non-condensing)			
Storage temperature [°C]	-20..... +60			
Typical noise emission [dB]	<40			
DIMENSION AND WEIGHT				
Dimensions(WxHxD) [mm]	457*654*228			
Weight [kg]	38			
Cooling concept	Natural			
Topology	Transformerless			
Communication interfaces	Ethernet/Meter(optional)/WiFi(optional)/GPRS(optional)/LAN(optional)/DRM/USB-Upgrade			
LCD display	Backlight 20*4 character			
Standard warranty [year]	5-10			

Features:

- Natural Cooling, quiet and low maintenance
- Max Efficiency up to 97%
- Multiple protection:RCD, isolation,over voltage over temperature, earth protection,short-circuit protection,etc
- Compatible with High-voltage batteries
- Transformerless design with software and hardware protection.

X1-AC (SINGLE PHASE)

	X1-AC-3.0	X1-AC-3.6	X1-AC-4.6	X1-AC-5.0
OUTPUT (AC)				
Nominal AC power [VA]	3000	3680	4600	4999
Max. apparent AC power [VA]	3000	3680	4600	4999
Nominal grid voltage(AC voltage range) [V]	220/230/240 (180 - 280)			230/240 (180 - 280)
Nominal grid frequency/range [Hz]	50/60			50/60
Nominal AC current [A]	13	16	20	21.7
Max. AC current [A]	13.6	16.8 (16 for G83)	21	21.7
Displacement power factor	0.8 leading to 0.8 lagging			
THDi, rated power [%]	<2			
INPUT AC				
Max. apparent AC power[VA]	3000	3680	4600	4999
Max. AC current[A]	13.6	16.8 (16 for G83)	21	21.7
Nominal grid voltage(AC voltage range)[V]	220/230/240 (180 - 280)			
Nominal grid Frequency/range[Hz]	50/60			
OUTPUT DC (BATTERY)				
Battery voltage range [V]	70-400			
Recommended battery voltage[V]	300			
Max.continuous charge/discharge current [A]	35			
Communication interfaces	CAN			
Reverse connect protection	Yes			
EFFICIENCY				
MPPT efficiency	97.0			
Max. Battery charge efficiency (GRID to BAT)	97.0			
Max. Battery discharge efficiency (BAT to AC)	97.5			
SAFETY & PROTECTION				
Over/under voltage protection	Yes			
DC isolation protection	Yes			
Grid protection	Yes			
DC injection monitoring	Yes			
Residual current detection	Yes			
Anti-islanding protection	Yes			
Over load protection	Yes			
Over heat protection	Yes			
POWER CONSUMPTION				
Internal consumption(night) [W]	<10			
STANDARD				
Safety	IEC62477			
EMC	EN 61000-6-1 / EN 61000-6-2 / EN 61000-6-3 / EN 61000-6-4			
Certification	G98/G99			
ENVIRONMENT LIMIT				
Degree of protection(according to IEC60529)	IP 65			
Operating temperature range [°C]	-20~+60 (derating at 45)			
Max. operation altitude [m]	2000			
Humidity [%]	0~100, condensing			
Storage temperature [°C]	-20~+60			
Typical noise emission [dB]	<25			
DIMENSION AND WEIGHT				
Dimensions(WxHxD) [mm]	430*341.5*143			
Weight [kg]	15.5	15.5	16.3	16.3
Cooling concept	Natural			
Topology	Non-isolated			
Communication interfaces	RS485/Meter/Wifi(optional)/GPRS(optional)/LAN(optional)/DRM/CAN/USB-Upgrade			
LCD display	Backlight 16*4 character			
Standard warranty [year]	5-10			

X1-RETRO FIT (SINGLE PHASE)

Version: E,C,I
E:with EPS function
C:without EPS function
I:internal EPS function device

	X1-FIT-3.7kW			X1-FIT-4.6kW			X1-FIT-5.0kW		
OUTPUT (AC)	C Version	E Version	I Version	C Version	E Version	I Version	C Version	E Version	I Version
Nominal AC power [VA]		3680			4600			4999	
Max. apparent AC power [VA]		3680			4600			4999	
Nominal grid voltage(AC voltage range) [V]		220/230/240 (180 - 270)			220/230/240 (180 - 270)			220/230/240 (180 - 270)	
Nominal grid frequency/range [Hz]		50/60			50/60			50/60	
Nominal AC current [A]		16			20			21.7	
Max. AC current [A]		16			21			21.7	
Displacement power factor		0.8 leading to 0.8 lagging			0.8 leading to 0.8 lagging			0.8 leading to 0.8 lagging	
THDi, rated power [%]		<2			<2			<2	
INPUT AC									
Max. apparent AC power[VA]	3680		7680	4600		9600	4999		9999
Max. AC current[A]	16		37.7	21		47	21.7		47.7
Nominal grid voltage(AC voltage range)[V]	220/230/240 (180 - 270)			220/230/240 (180 - 270)			220/230/240 (180 - 270)		
Nominal grid Frequency/range[Hz]	50/60			50/60			50/60		
BATTERY									
Battery voltage range [V]	85-400								
Recommended battery voltage[V]	300								
Max.continuous charge/discharge current [A]	20 (adjustable)								
Communication interfaces	CAN/ RS485								
Reverse connect protection	YES								
EPS OUTPUT(WITH BATTERY)									
EPS MAX. continuous apparent power [VA]	-	5000		-	6000		-	6000	
EPS rated voltage[V],Frequency [Hz]	-	230, 50/60		-	230, 50/60		-	230, 50/60	
EPS MAX.continuous current [A]	-	21.7		-	26		-	26	
EPS peak apparent power [VA]	-	6000		-	8000		-	8000	
Changeover time [ms]	-	<500		-	<500		-	<500	
THDv, linear Load	-	<2		-	<2		-	<2	
Changeover device	-	External	Internal	-	External	Internal	-	External	Internal
EFFICIENCY									
Max. Battery charge efficiency (GRID to BAT)	95.60								
Max. Battery discharge efficiency (BAT to AC)	97.00								
Max. efficiency	97.00								
POWER CONSUMPTION									
Internal consumption(night) [W]	<3								
SAFETY& PROTECTION									
Over/under voltage protection	YES								
Monitoring ground fault protection	YES								
Grid protection	YES								
STANDARD									
Safety	IEC62109-1 / -2 / IEC62040 /								
EMC	EN 61000-6-1 / EN 61000-6-2 / EN 61000-6-3								
Certification	VDE0126-1-1 A1:2012/VDE-AR-N4105/G98/G99/G100/AS4777/EN50438/CEI0-21/VDE2510								
ENVIRONMENT LIMIT									
Degree of protection(according to IEC60529)	IP65								
Operating temperature range [°C]	-20..... +60 (derating at +45)								
Max. operation altitude [m]	2000								
Humidity [%]	4~100 (condensing)								
Storage temperature [°C]	-20..... +60								
Typical noise emission [dB]	<40								
DIMENSION AND WEIGHT									
Dimensions(WxHxD) [mm]	476*464*180								
Weight [kg]	23								
Cooling concept	Natural								
Topology	Transformerless								
Communication interfaces	Ethernet /Meter/WIFI(optional)/GPRS(optional)/LAN(optional)/DRM/USB-Upgrade								
LCD display	Backlight 20*4 character								
Standard warranty [year]	5-10								

Plug & Play Wifi Monitoring

Monitor Your System Anywhere In The World

Monitor Over The World

Wherever you are in the world, as long as you have a wifi connection you can check up on your SolaX system. View its current production, money saved and even trees planted!

Accessible Via App Or Web

The SolaX Cloud is available via app or web browser, whichever you prefer. Our app can also be found in either the iOS or the Android store.

Battery Management

Use the SolaX Cloud to check the status of your battery. View live data and check the historical performance using a range of reporting tools.

Email Reporting

The SolaX Cloud will send you detailed email reports regarding your systems status, the intelligent cloud will pick up on any fault and ping an in-depth report to the specified email address.

Product Name	Pocket Wifi
Model	Pocket Wifi 2.0
Supply Voltage	+3.3V
Frequency	2.400~2.472GHz
Antenna Gain	3dB
Interface	UART/USART
Protocol	TTL
Wireless mode	802.11b/g/n
Degree of protection	IP 65
Dimension	82X40X24.5mm
Weight	<35g