



Solax series of hybride inverters is a very flexible design as it combines solar panels with energy storage and an own local island grid operation. It can also cooperate with an external grid and if so it works in phase synchronisation to the other grid. In island mode it operates with own internal sync and can control several Solar inverters in parallel. There are single phase models and 3 phase models in several steps of output power. Power range for 3 phase is 3 KW to 10 KW / unit. Single phase is from 3 KW to 5 KW. MPPT voltage is 330-800 Volt DC and pear input 1 KW. Battery source can be max 500 volt.



	X1-HYBRID-3.0T	X1-HYBRID-3.7T	X1-HYBRID-4.6T	X1-HYBRID-5.0T	X3-Hybrid-5.0T	X3-Hybrid-6.0T	X3-Hybrid-8.0T	X3-Hybrid-10.0T
INPUT (DC)								
Max recommended DC power [W]	4000	5000	6000	6000	6000	8000	10000	13000
Max DC voltage [V]	600	600	600	600	600	800	800	1000
Nominal DC operating voltage [V]	360	360	360	360	360	720	720	720
Max input current [A]	30/30	10/30	10/30	10/30	10/30	11/31	11/31	21/31
Max short circuit current [A]	14/14	14/14	14/14	14/14	14/14	14/14	14/14	23/14
MPPT voltage range [V]	125-530	125-530	125-630	125-560	230-800	230-800	370-800	330-800
No. of MPPT trackers	2	2	2	2	2	2	2	2
Strings per MPPT tracker	1	1	1	1	1	1	1	2/1
OUTPUT AC								
Nominal AC power [VA]	3000	3600	4600	4699	5000	6000	8000	10000
Max AC power [VA]	3000	3600	4600	4699	5000	6000	8000	10000
Max AC power [VA]	2500 (80 to 27.9)	2500 (80 to 27.9)	2500 (80 to 27.9)	2500 (80 to 27.9)	400 (36.0 to 44.0)	400 (36.0 to 44.0)	400 (36.0 to 44.0)	400 (36.0 to 44.0)
Max grid voltage (AC voltage range) [V]	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60
Max grid frequency [Hz]	13	16	20	21.7	7.6	9	12.2	15
Nominal AC current [A]	14.4	16	21	21.7	8.5	10	13.5	16
Max AC current [A]	14.4	16	21	21.7	8.5	10	13.5	16
Replacement power factor	0.8 leading ... 0.8 lagging							
Total harmonic distortion (THD, rated power) [%]	<2							
Parallel operation	Yes							
Load control	Yes (optional)							
INPUT DC (BATTERY)								
Max input voltage [V]	85-400							
Recommended battery voltage [V]	300							
Max charging/discharging power [W]	6000							
Max charging/discharging current [A]	20							
Inverter connection	CAN/RS485							
Inverter connection	Yes							
UPS OUTPUT (WITH BATTERY)								
PS-rated power [VA]	4000	4000	5000	5000	5000	6000	8000	10000
PS-rated voltage [V], frequency [Hz]	230, 50/60	230, 50/60	230, 50/60	230, 50/60	400 (36.0, 50/60)	400 (36.0, 50/60)	400 (36.0, 50/60)	400 (36.0, 50/60)
PS-rated current [A]	17.4	17.4	21.7	21.7	7.6	9	12.2	15
PS-peak power [W] (duration [s])	8000/10	8000/10	8000/10	8000/10	10000/60	12000/60	16000/60	16000/60
Switch time [s]	<0.5							
Total harmonic distortion (THD, linear load) [%]	<2							
Parallel operation	Yes							
EFFICIENCY								
MPPT efficiency [%]	99.90	99.90	99.90	99.90	99.90	99.90	99.90	99.90
Full efficiency [%]	97.00	97.00	97.00	97.00	97.00	97.00	97.00	97.00
Max efficiency [%]	97.80	97.80	97.80	97.80	97.60	97.60	97.60	97.60
Battery charge/discharge efficiency [%]	98.50	98.50	98.50	98.50	96.00	96.00	96.00	96.00
POWER CONSUMPTION								
Standby consumption (night) [W]	<7							
Idle mode	YES							
STANDARD								
Safety	IEC 62109-1-2 / IEC 62040							
EMC	EN 61000-6-1 / EN 61000-6-2 / EN 61000-6-3							
Certification	VDE 0126-1-1 AL 2012 / VDE-AR-N 4105 / CE / CB / IEC 62109-1 / IEC 62040 / IEC 61000-6-1 / IEC 61000-6-2 / IEC 61000-6-3							
ENVIRONMENT LIMIT								
Protection class	IP65							
Operating temperature range [°C]	-30 to +60 (derating at +45)							
Altitude [m]	<2000							
Storage temperature [°C]	-20 to +60							
Relative humidity [%] (at 25°C)	<90							
Over voltage category	III (electric supply side) / II (PV side)							
DIMENSION AND WEIGHT								
Dimensions (W x H x D) [mm]	460 x 77 x 181.5							
Weight [kg]	26.9							
Cooling concept	Forced-cooling							
Topology	Transformers							
Communication	Ethernet, Meter, WiFi (optional), RS485, CAN, USB, ISO alarm, Parallel operation							
LCD display	Backlight 20°-4 character							
Standard warranty [year]	5-10							