



A Profitable House



SolaX Single Phase High Voltage Storage System

Compared with normal storage system, the **high voltage** system's overall efficiency can be higher by about **8%**

X1-Hybrid Features

- Dual MPPT for different roof orientation
- IP65 rating for indoor and outdoor installation
- Support high power loads when the grid goes down
- Remote upgrade and maintenance
- Full working efficiency with temperature of 45°C
- Four intelligent working modes for different conditions

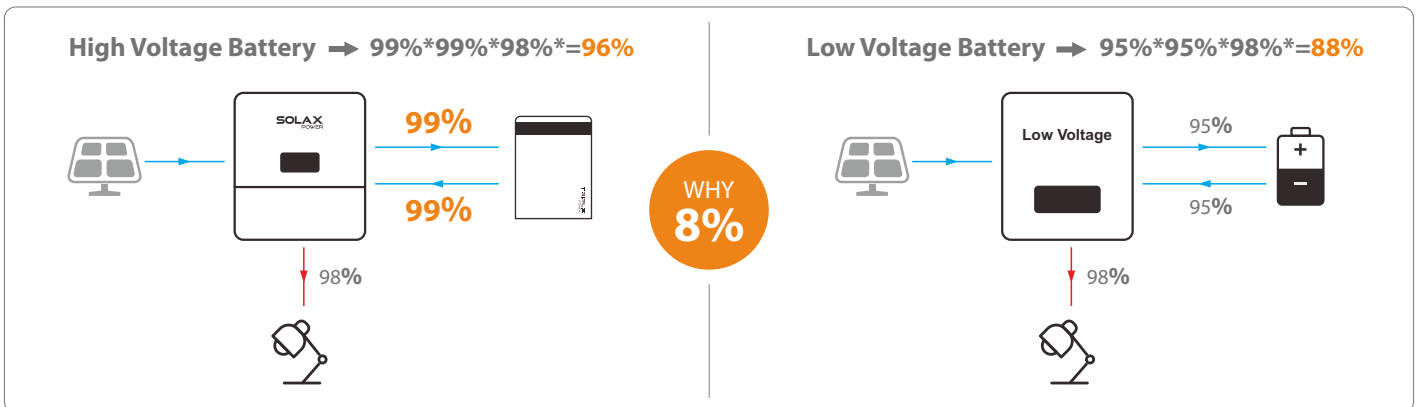
For Example: one X1 hybrid with 3PCS T58



Available energy in 3PCS T58
 $5.8\text{kWh} \times 3 \times 90\%(\text{DOD}) = 15.66\text{kWh}$

With degrading lifetime
 $15.66\text{kWh} \times 80\%(\text{capacity fading}) = 12.53\text{kWh}$

You can save each cycle
 $12.53\text{kWh} \times 8\%(\text{efficiency}) = 1\text{kWh}$





X1-HYBRID HV (SINGLE PHASE)

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

X1-HYBRID-3.0T

X1-HYBRID-3.7T

X1-HYBRID-5.0T

INPUT (DC)	X1-HYBRID-3.0T		X1-HYBRID-3.7T		X1-HYBRID-5.0T	
	C Version	E Version	C Version	E Version	C Version	E Version
Max.PV array power [Wp]	4500		5550		7500	
Max.recommended DC power[W]	A:3000 B:3000		A:3000 B:3000		A:3000 B:3000	
Max.DC voltage [V]	600		600		600	
Nominal DC operating voltage [V]	360		360		360	
Max. input current (input A/input B) [A]	12/12		12/12		12/12	
Max. short circuit current (input A/input B) [A]	14/14		14/14		14/14	
MPPT voltage range[V]	125-550		125-550		125-550	
Start operating voltage[V]	150		150		150	
No. of MPP trackers / Strings per MPP tracker	2(1/1)		2(1/1)		2(1/1)	
INPUT AC						
Max. apparent AC power[VA]	3000	3000	3680	3680	4999	4999
Max. AC current[A]	14.4	14.4	16.0	16.0	21.7	21.7
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	
OUTPUT AC						
Nominal AC power [VA]	3000		3680		4999	
Max. apparent AC power [VA]	3300		4048(3680 for G98)		5500 (4600 for VDE4105)	
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]	13		16		21.7	
Max. AC current [A]	14.3		17.6 (16 for G98)		23.9 (20 for VDE4105)	
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			
Communication interfaces			CAN/RS485			
Reverse connect protection			Yes			
EPS OUTPUT (WITH BATTERY)						
EPS MAX. continuous apparent power [VA]	-	4000	-	4000	-	5000
EPS rated voltage[V],Frequency [Hz]	-	230, 50/60	-	230, 50/60	-	230, 50/60
EPS MAX.continuous current [A]	-	21.7	-	21.7	-	26.0
EPS peak apparent power [VA] Duration [s]	-	6000 10	-	6000 10	-	8000 10
Changeover time [ms]	-	<500	-	<500	-	<500
THDv, linear Load [%]	-	<2	-	<2	-	<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 (Night) [W]			<15 for hot standby, <3 for cold standby			
STANDARD						
Safety			IEC62109-1/-2			
EMC			EN61000-6-1/EN61000-6-2/EN61000-6-3			
Certification			VDE 0126-1-1 A1:2012 / VDE-AR-N 4105 /G99 /G98 / AS4777 / EN50549/ CEI 0-21 /VDE 2510 / and so on			
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 (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			Non-isolated			
Communication interfaces			Ethernet/Meter/Pocket WiFi(optional)/Pocket LAN(optional)/Pocket GPRS(optional)/DRM/USB/ISO alarm/CT			
LCD display			Backlight 20*4 character			
Standard warranty [years]			5-10			