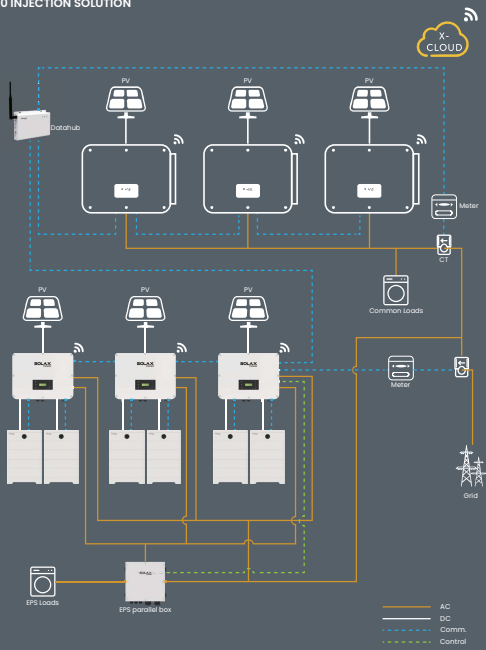


0 INJECTION SOLUTION



POWERING A GREEN FUTURE

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V2. Information may be subject to modify without notice.  
680-00028-00

——— AC  
 - - - - DC  
 ······ Comm.  
 - - - - Control



SOLAX  
X3-ULTRA



Features

**Economic**

- Maximum 200% oversize and 200% PV input power
- Maximum 96A input current per MPPT, support high power solar panel

**Intelligent**

- AI ready, forecasting solar generation and home consumption, smart energy management strategy
- SPP ready, Solax cloud supports resource aggregator (2030, S, OpenADR)
- Support smart scene function, intelligent loads management (e.g. Heat pump, EV charger)
- Micro-grid ready, supporting a variety of scenarios, both on-grid and off-grid, balancing power between PCS and Hybrid in real time
- Support 7\*24h scheduling mode
- Support Wireless meter solution
- Dual independent battery ports are ready to expand battery capacity free

**Robust**

- Robust back-up ability, switch over time <math>\le 10ms</math>, up to 200% EPS output for 10s, support half-wave loads
- Stronger, EPS operation without battery

**Safe**

- IP65 protection level
- AC&DC SPD type II, always guarding the inverter
- AFCI optional

	X3-UL1-15K	X3-UL1-18.9K	X3-UL1-20K	X3-UL1-25K	X3-UL1-30K
<b>INPUT PV</b>					
Max recommended PV array power (Wp)	30000	40000	50000	50000	60000
Max input DC power (W)	30000	40000	40000	50000	60000
Max DC voltage (V)	1000				
Nominal DC operating voltage (V)	600				
No. of MPPT trackers / Strings per MPPT tracker	2 (2/2)	2 (2/2)	2 (2/2)	3 (2/2)	3 (2/2)
Max. input current (input PV1 / input PV2 / input PV3) (A)	15 / 15 / 15 (45)	15 / 15 / 15 (45)	15 / 15 / 15 (45)	15 / 15 / 15 (45)	15 / 15 / 15 (45)
Max. theoretical power (input PV1 / input PV2 / input PV3) (W)	900 / 900 / 900	900 / 900 / 900	900 / 900 / 900	900 / 900 / 900	900 / 900 / 900
MPPT voltage range (V)	100 - 900	100 - 900	100 - 900	100 - 900	100 - 900
Start output voltage (V)	200	200	200	200	200
<b>OUTPUT AC/DC/CH</b>					
Nominal AC power (kW)	10000 (UL477/20000)	13999	15000	19000	20000 (UL477/20000)
Max. apparent AC power (VA)	10000 (UL477/20000)	13999	15000	19000	20000 (UL477/20000)
Rated grid voltage (AC voltage range) (V)	190V-400V (230)				
Rated grid frequency (Hz)	50/60				
Nominal AC current (A)	21.8	29.0	33.0	36.3	43.5
Max. AC current (A)	25.0	29.0	33.0	39.0	43.5
Displacement power factor	1 (1.0 ± 0.8)				
Total harmonic distortion (THD <sub>v</sub> , rated power) (%)	< 3				
<b>INPUT AC</b>					
Nominal AC power (kW)	10000	13999	15000	19000	20000
Nominal AC current (A)	21.8	29.0	33.0	36.3	43.5
Rated grid voltage (AC voltage range) (V)	190V-400V (230)				
Rated grid frequency (Hz)	50/60				
<b>BATTERY</b>					
Battery type	LiFePO4 (100)				
Battery voltage range (V)	145 - 800				
Max. charge / Discharge current (A)	60 (30 x 2)				
<b>EPS OUTPUT (WITH BATTERY)</b>					
EPS rated power (kW)	2 times of rated power (10)				
EPS rated voltage (V), Frequency (Hz)	190V (230V/50/60)				
EPS rated current (A)	10000	13999	15000	19000	20000
Switchover time (ms)	10				
<b>POWER CONSUMPTION</b>					
Internal consumption (night) (W)	< 5				
<b>PROTECTION</b>					
Anti-ramp protection	Yes				
DC reverse polarity protection	Yes				
Insulation monitoring	Yes				
Residual current monitoring	Yes				
AC overcurrent protection	Yes				
AC short-circuit protection	Yes				
AC overvoltage protection	Yes				
Over heat protection	Yes				
Battery reverse charging from grid	No				
Surge protection	Type 2 SPD and AC				
ATEX	DPT				

	X3-UL1-15K	X3-UL1-18.9K	X3-UL1-20K	X3-UL1-25K	X3-UL1-30K
<b>EFFICIENCY</b>					
Max. efficiency / Standby efficiency	98.9% / 97.7%	98.0% / 97.7%	98.0% / 97.7%	98.0% / 97.7%	98.0% / 97.7%
Rated battery charge / Discharge efficiency	98.5% / 97.0%	98.5% / 97.0%	98.5% / 97.0%	98.5% / 97.0%	98.5% / 97.0%
<b>STANDARD</b>					
Safety	EN / IEC62029-1 / -2				
EMC	EMC009-6-1 / 2 / 3 / 4, EMC008-5-1 / 2, EN50174, IEC-60950				
UL/ETL op. no.	VDE4105 / GW / A6777 / EN5049 / CEI 0-21 / IEC62077 / IEC / IEC617 / IEC-60950-2-1 / IEC60950-2-2				
<b>GENERAL DATA</b>					
Protection class	IP66				
Operating temperature range (°C)	-35 ~ 60 (Derating above +45)				
Relative humidity (%)	0 ~ 100				
Altitude (m)	≤ 5000				
Storage temperature (°C)	-40 ~ +70				
Dimensions (WxDxH) (mm)	696 x 526 x 240				
Weight (kg)	47				
Cooling concept	Smart cooling				
Topology	Transformerless				
Communication	Modbus (RS485) / Meter (RS485) / Di x 5, DO x 2				

① Input PV1 only available for 20K and 30K.

