Solar
Optimal
Long Life-cycle
Accurate
Xtraordinary

**Can be modified without notice.(V1.9)*

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SOLAX POWER

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ABOUT THE **COMPANY**

SolaX Power Network Technology (Zhejiang) Co., Ltd. was founded in 2012 and is committed to the field of smart energy microgrid, owning core products including PV on-grid inverters, energy storage inverters, energy storage batteries, PV energy storage systems, and more. To date, SolaX offers the most diversified product line globally and has the widest application coverage. SolaX is the global leader in the field of smart PV energy storage systems.

SolaX is a hi-tech enterprise that integrates R&D, production, sales and service as one, and is dedicated to providing grid-tied inverters, storage inverters, solar battery storage and smart PV energy storage systems.

SolaX has been authorized 91 national patents since its establishment, including more than 30 invention patents. SolaX inverters have been granted more than 500 international authorized certifications until now. At present, SolaX sells its products to more than 80 countries.

SolaX's products have passed the German VDE certification, Italian CEI certification, European Union EN certification, Australian SAA certification, American UL certification and other mainstream market certifications. SolaX is also the first Chinese manufacturer to obtain the Japanese S-Mark certificate for its residential energy storage system, which demonstrated the excellent performance and stable reliability of SolaX residential energy storage system.

In 2013, SolaX successfully launched Asian first X-Hybrid energy storage inverter, and now it's the 4th generation. SolaX is truly a leader in solar and energy storage industry.

INVESTORS

Main Shareholders & Investors

SPIC

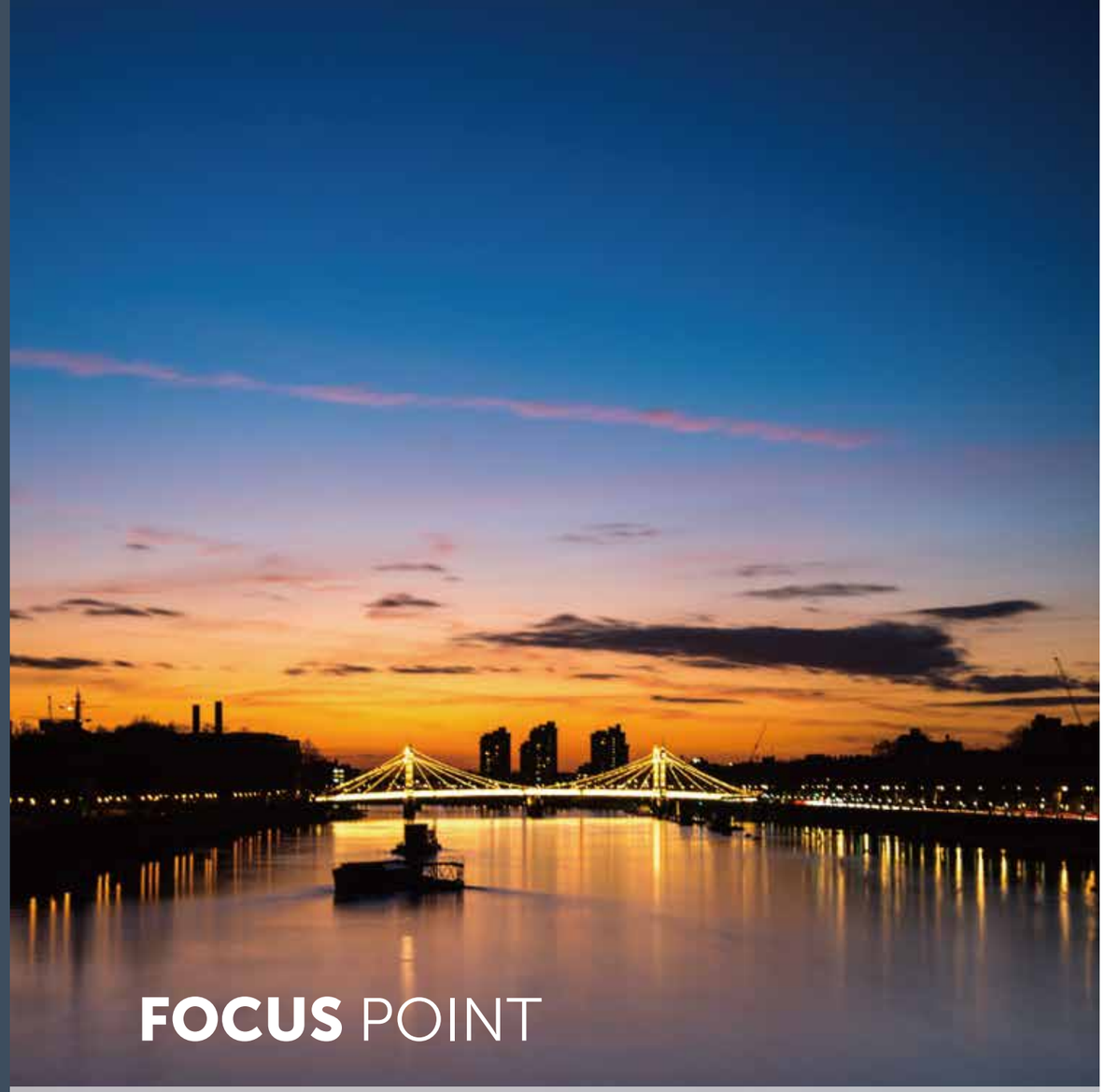
State Power Investment Corporation

- One of the five major power & electricty companies in China
- Total assets of USD 157 billion in 2018--Data from fortune.com

CTGC

China Three Gorges Corporation

- The largest hydroelectric power plant in the world
- One of the world's largest energy companies
- Total assets of USD 77.3 billion in 2014--Data from wikipedia



FOCUS POINT

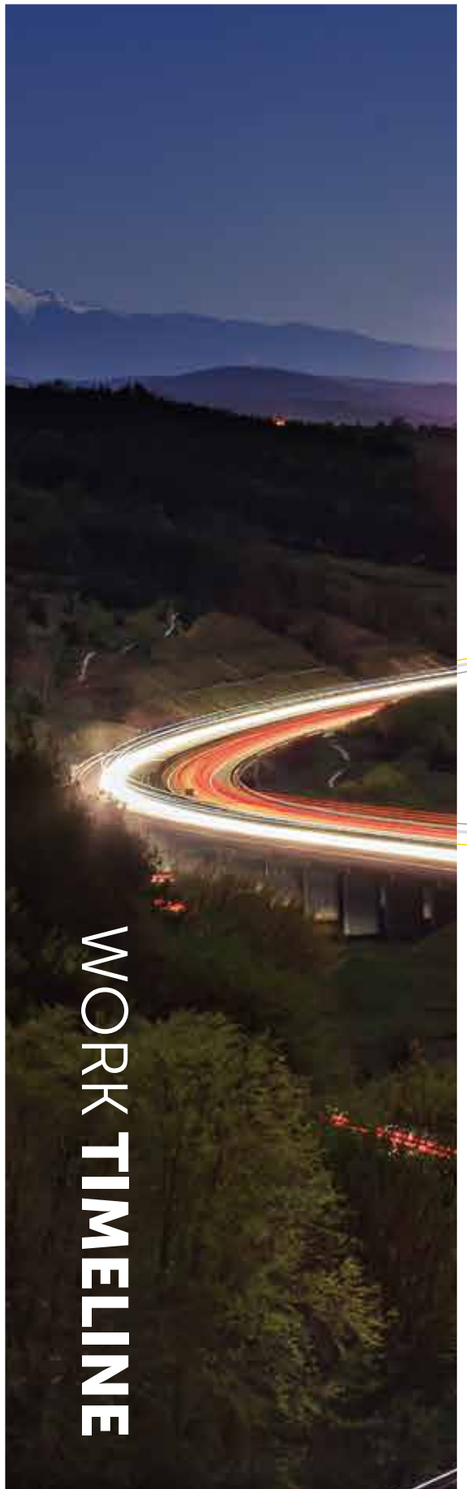
The SolaX vision is to be a world leader in the development, production and distribution of solar inverters and batteries for energy storage. The product range incorporates the very latest in solar innovation thanks to the continued focus on R&D and unceasing commitment to pushing back the boundaries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

2022

2021

reddot winner 2021

TÜVRheinland®
"All Quality Matters" Award



2011

• First inverter delivered

2012

• SolaX Power Set up

2013

• Asian first energy storage inverter
• New office in the UK

2014

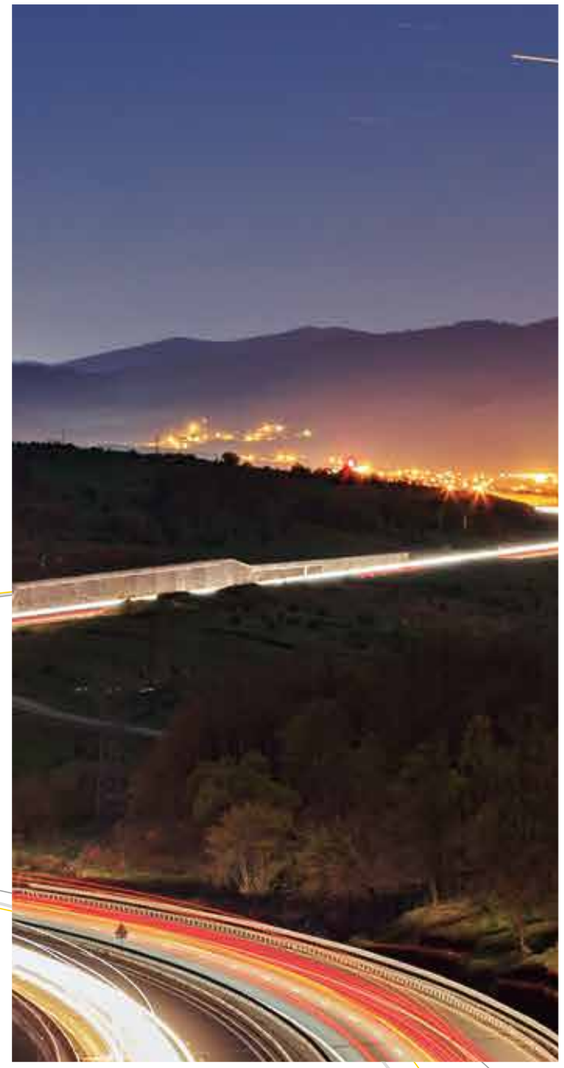
• New office in Australia

2015

• Europe's first 3-phase hybrid HV inverter

2016

• New office in the Netherlands
• X-Hybrid inverter released the third generation



2017

• Global release of AC energy storage solution

2018

• New Triple Power HV battery

2019

• New offices in Germany
• Released A1-ESS for North America

2020

• Released X1-ESS G4
• Released J1ESS for Japan Market

2021

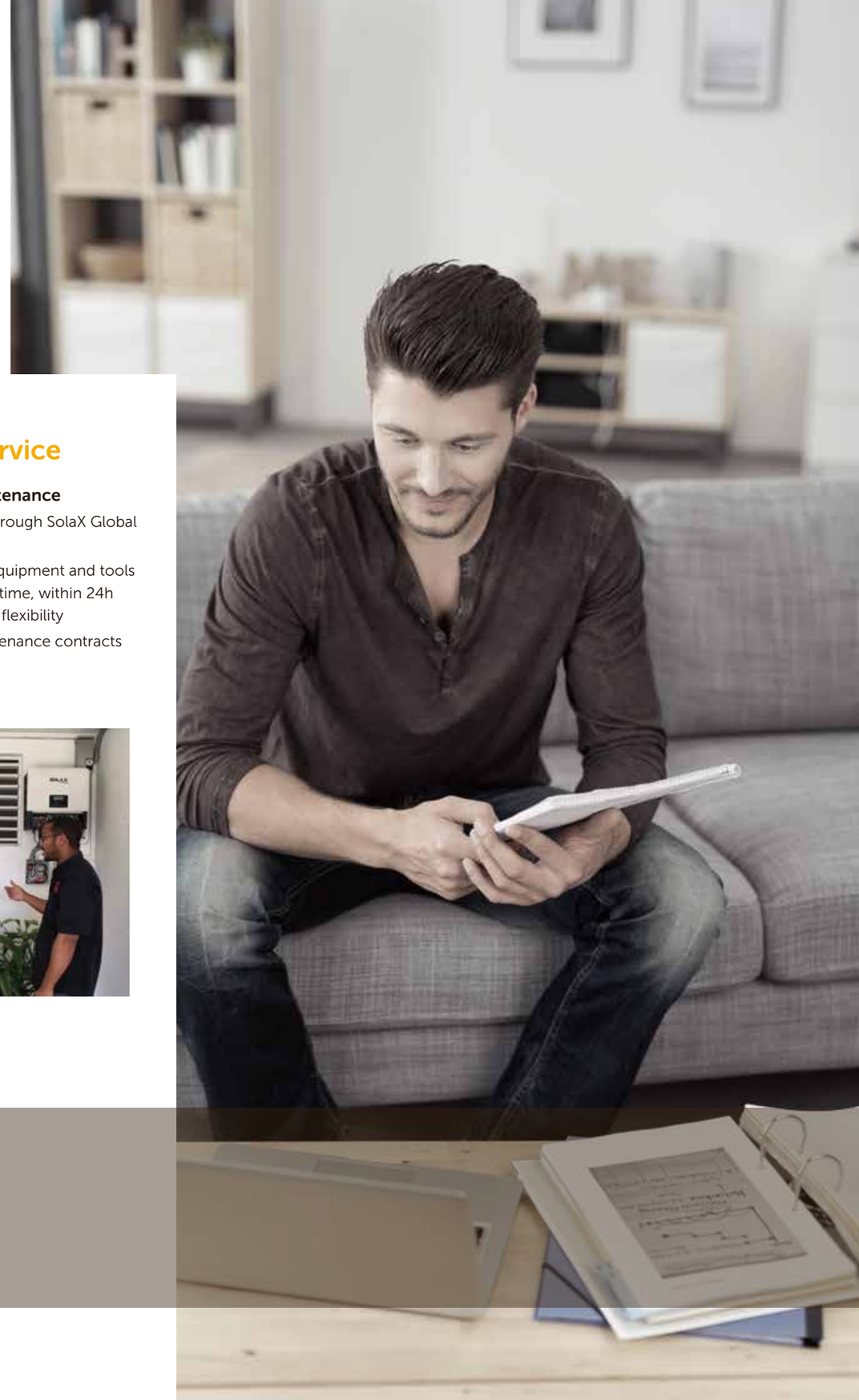
• Won 2021 Red Dot Award for Product Design

WHERE WE **WORK**

ONE STOP SOLUTION

All products are solely-developed and self-manufactured by SolaX, including hybrid inverters, storage batteries, BMS.

From manufacturing to after-sales support, you can trust us for high-quality products and services.



GLOBAL SERVICE SUPPORT

Training Support

Dedicated technical experts provide professional trainings to

- Our Customers
- SolaX Power's Service staff
- Our global Service Providers

Webinar online training

On-Site traning

After Sales Service Support

Hotline Support

- Assistance and technical support via phone or Email

Local Technical Support

- Local support engineers (AU, EU, UK, US)

Warranty

- 5 Years Standard Warranty with purchasable warranty extension up to 20 years

On-Site Service

Repair, and Maintenance

- On-Site service through SolaX Global Team
- Latest technical equipment and tools Short responding time, within 24h globally, and high flexibility
- Service and maintenance contracts available

GLOBALLY **CERTIFIED**

CERTIFICATE AUTHORITY

TÜVRheinland · TÜV SÜD · BUREAU VERITAS · SGS · DEKRA

Standards-Compliant

CE · EUROPEAN STANDARDS · DVE · ena energynetworks association · COMITATO ELETTROTECNICO ITALIANO · IEC · Synergrid · SAA · CLEAN ENERGY COUNCIL · INMETRO · CSA GROUP · CERTIFICATED UL AGENCY · Bureau of Indian Standards · JIS · TÜVRheinland

CLIENT SAYS

Five years already when my inverter was installed/in service, since then till now still in good working condition.

Normelito Ulep, Philippines

The system is reliable and efficient.

G Tronchin, South Africa

Very flexible options. Designed with easy of install and use in mind.

Richard Meegdes, Netherlands

As a user, I think SolaX gives me a very good experience. Although there were some minor problems, it did not affect my love for it. I will continue to choose SolaX in the future

Mary

Among these big brands, I think SolaX is the most technologically advanced brand, which brings me the best experience. I have its products at home, and it understands me better than other brands

Lucy

Price quality the best on the market. Also a good after-sales service

Patrick, Belgium

Although the after-sales service is not very satisfactory, SolaX's products are definitely worth your purchase, which I have no doubt, so I will definitely recommend SolaX to those around me

Lendell

They appear to care about their products and their customers to a very high degree.

Bob, USA

SOLAX
PROJECTS

SOLAX **CLOUD**

Everything you need to manage your power

- All Platforms
- Monitor Usage
- Real-time Information
- Automatic Notifications
- Simple Interface

Control at your fingertips

Use your smart devices to connect and control your energy

ANDROID APP ON Google play

Available on the App Store

Whether it's for residential or commercial applications, our centralized management and monitoring software can save your time and money. With SolaX Cloud, our customers and installers can always view critical data in real-time. Designed with the end-user in mind, the SolaX Cloud is simple to use. Everything you need at your fingertips.

SOLAX **INVERTER** DATASHEET

X1-MINI

S: Single MPPT
D: With DC switch N: Without DC switch

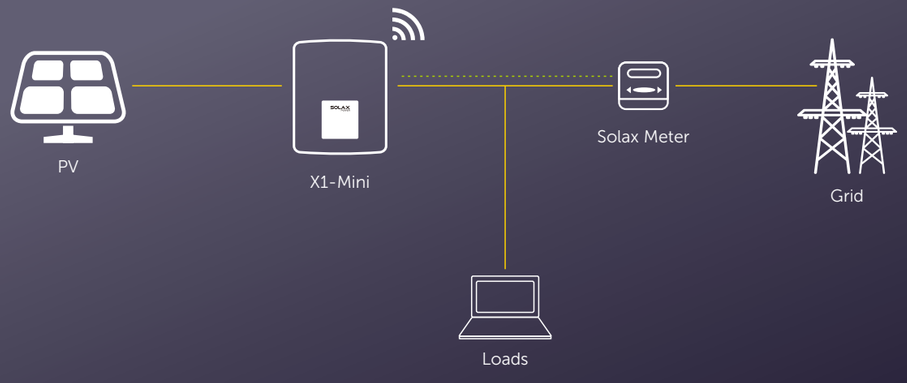
SINGLE-PHASE
ON-GRID INVERTER

0.6~3.6kW

Features

- Small and compact size
- 150% oversizing and 110% overloading
- Max. DC input 14A per string
- Low startup voltage and wide MPPT range
- CT/Meter compatibility
- Built-in SPD on both AC and DC side
- Remote upgrade and maintenance

SOLUTION DESIGN



X1-MINI

SINGLE-PHASE

	X1-0.6-S-D(L) X1-0.6-S-N(L)	X1-0.7-S-D(L) X1-0.7-S-N(L)	X1-1.1-S-D(L) X1-1.1-S-N(L)	X1-1.5-S-D(L) X1-1.5-S-N(L)	X1-2.0-S-D(L) X1-2.0-S-N(L)	X1-2.5K-S-D(L) X1-2.5K-S-N(L)	X1-3.0K-S-D(L) X1-3.0K-S-N(L)	X1-3.3K-S-D(L) X1-3.3K-S-N(L)	X1-3.6K-S-D(L) X1-3.6K-S-N(L)
DC INPUT									
Max. PV array input power [Wp]	900	1050	1650	2250	3000	3750	4500	4950	5400
Max. DC input voltage [V]	450	450	450	450	450	550	550	550	550
Startup voltage [V]	50	50	50	50	50	70	70	70	70
Nominal input voltage [V]	360	360	360	360	360	360	360	360	360
MPP tracker voltage range [V]	45 ~ 430	45 ~ 430	45 ~ 430	50 ~ 430	50 ~ 430	55 ~ 530	55 ~ 530	55 ~ 530	55 ~ 530
No. of MPP trackers / Strings per MPP tracker	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
Max. input current [A]	14	14	14	14	14	14	14	14	14
Max. short circuit current [A]	16	16	16	16	16	16	16	16	16
AC OUTPUT									
Nominal AC output power [W]	600	700	1100	1500	2000	2500	3000	3300	3680
Nominal AC output current [A]	2.61	3.04	4.78	6.52	8.7	10.8	13.04	14.3	16
Max. output apparent power [VA]	660(600 for VDE4105)	770	1210	1650	2200	2750	3300	3300	3680
Max. AC output current [A]	2.9	3.3	5.3	7.2	9.6	11.9	14.3	14.3	16
Nominal AC voltage [V]	220/230/240;180 ~ 280								
Nominal grid frequency / Grid frequency range [Hz]	50/60;±5								
Displacement power factor	0.8 leading ~ 0.8 lagging								
THDi (Rated power) [%]	<3								
SYSTEM DATA									
Max. Efficiency [%]	98								
Euro. Efficiency [%]	95.00	95.00	95.50	96.00	96.50	96.50	96.50	96.50	96.50
Standby consumption [W] @Night	0								
Degree of Protection	IP66								
Operating temperature range [°C]	-25 ~ +60 (derating at 45)								
Max. operation altitude [m]	≤2000								
Humidity [%]	0~100 (condensation)								
Typical noise emission [dB]	30								
Storage temperature [°C]	-30~+70								
Dimensions (WxHxD) [mm]	267 x 328 x 126								
Net weight [kg]	6	6	6	6	6	8.3	8.3	8.3	8.3
Cooling concept	Natural cooling								
Communication interfaces	RS485 / DRM / Pocket WiFi / (Optional: Pocket LAN/4G) / USB/ (Optional: CT/Meter)								
PROTECTION									
Over/under voltage protection	YES								
DC isolation protection	YES								
Monitoring ground fault protection	YES								
Grid monitoring	YES								
DC injection monitoring	YES								
Back feed current monitoring	YES								
Residual current detection	YES								
Anti-islanding protection	YES								
Over temperature protection	YES								
SPD	YES								
STANDARD									
Safety	EN/IEC62109-1/-2								
EMC	EN61000-6-1/2/3/4;EN61000-3-2/3/11/12								
Certification	IEC61727, EN50549, G98/G99, AS 4777.2, VDE4105, CEI 0-21, RD1699, UNE 206007-1, VFR								

** V3.1. Information may be subject to modify without notice.650.00020.00*

X1-BOOST

T: Dual MPPT
D: With DC switch N: Without DC switch

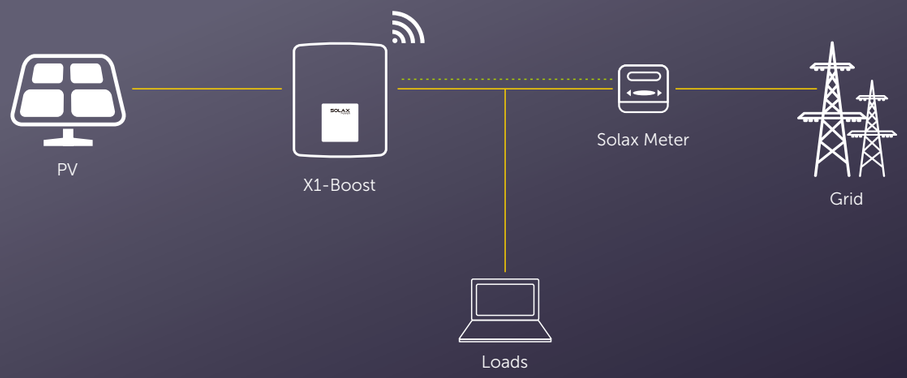
SINGLE-PHASE
ON-GRID INVERTER

3.0~6.0kW

Features

- Remote upgrade and maintenance
- 150% oversizing and 110% overloading
- Max. DC input 14A per string
- AC/DC built-in SPD
- CT/Meter compatibility
- Easy to install and setup
- 24h monitoring and maintenance (Optional)

SOLUTION DESIGN



X1-BOOST

SINGLE-PHASE

	X1-3.0-T-D(L) X1-3.0-T-N(L)	X1-3.3-T-D(L) X1-3.3-T-N(L)	X1-3.6-T-D(L) X1-3.6-T-N(L)	X1-4.2-T-D(L) X1-4.2-T-N(L)	X1-4.6-T-D(L) X1-4.6-T-N(L)	X1-5.0-T-D(L) X1-5.0-T-N(L)	X1-5.5K-T-D(L) X1-5.5K-T-N(L)	X1-6.0K-T-D(L) X1-6.0K-T-N(L)
DC INPUT								
Max. PV array input power [Wp]	4500	4950	5400	6300	6900	7500	8250	9000
Max. DC input voltage [V]	600	600	600	600	600	600	600	600
Startup voltage [V]	100	100	100	100	100	100	100	100
Nominal input voltage [V]	360	360	360	360	360	360	360	360
MPP tracker voltage range [V]	70 ~ 580	70 ~ 580	70 ~ 580	70 ~ 580	70 ~ 580	70 ~ 580	70 ~ 580	70 ~ 580
No. of MPP trackers / Strings per MPP tracker	2/1	2/1	2/1	2/1	2/1	2/1	2/1	2/1
Max. input current (Input A/Input B) [A]	14/14	14/14	14/14	14/14	14/14	14/14	14/14	14/14
Max. short circuit current (Input A/Input B) [A]	16/16	16/16	16/16	16/16	16/16	16/16	16/16	16/16
AC OUTPUT								
Nominal AC output power [W]	3000	3300	3680	4200	4600	5000①	5500	6000
Nominal AC output current [A]	13	14.3	16	18.3	20	21.7	23.9	26.1
Max. output apparent power [VA]	3300	3630	4048(3680 for G98/TOR)	4620	5060	5500②	6050	6600(4600 for VDE4105)
Max. AC output current [A]	14.3	15.8	17.6(16 for G98/TOR)	20.1	22	23.9③	26.3	28.7(20 for VDE4105)
Nominal AC voltage [V]	220/230/240; 180~280							
Nominal grid frequency / Grid frequency range [Hz]	50/60; ±5							
Displacement power factor	0.8 leading ~ 0.8 lagging							
THDi (Rated power) [%]	<2							
SYSTEM DATA								
Max. Efficiency [%]	97.80							
Euro. Efficiency [%]	97.00							
Standby consumption [W] @Night	<2							
Degree of Protection	IP66							
Operating temperature range [°C]	-25~+60 (Derating at 45°C)							
Max. operation altitude [m]	≤3000							
Relative humidity [%]	0~100 (Condensing)							
Typical noise emission [dB]	30							
Storage temperature [°C]	-30~+70							
Dimensions (W × H × D) [mm]	341.5 × 430 × 143							
Net weight [kg]	13.5	13.5	13.5	15	15	15	15	15
Cooling concept	Natural Cooling							
Communication interfaces	Pocket WiFi / (Optional: Pocket LAN/4G) / RS485 / DRM / USB / (Optional: CT/Meter)							
PROTECTION								
Over/under voltage protection	YES							
DC isolation protection	YES							
Monitoring ground fault protection	YES							
Grid monitoring	YES							
DC injection monitoring	YES							
Back feed current monitoring	YES							
Residual current detection	YES							
Anti-islanding protection	YES							
Over temperature protection	YES							
SPD	YES							
STANDARD								
Safety	IEC/EN 62109-1/-2							
EMC	EN61000-6-1/2/3/4, EN61000-3-2/3/11/12							
Certification	IEC61727, EN50549, G98/G99, AS 4777.2, VDE4105, CEI 0-21, RD1699, UNE 206007-1, VFR							

① 5000 (4600 for VDE4105) ② 5500 (4600 for VDE4105; 5000 for C10/11) ③ 23.9 (20 for VDE4105; 21.7 for C10/11) ** V3.1. Information may be subject to modify without notice.* 650.00021.00

X3-MIC G2

THREE-PHASE
ON-GRID INVERTER

3~15kW

Features

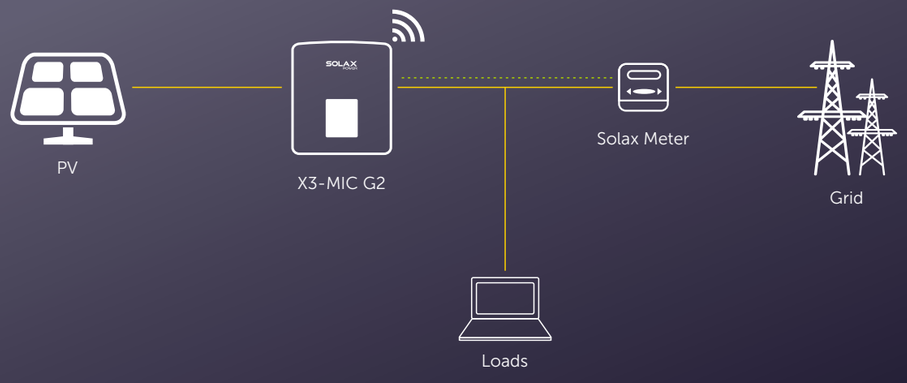
High-efficiency
- Maximum efficiency is up to 98.3%
- Low startup voltage, ultrawide MPPT voltage range
- 200% oversizing, 110% overloading output (Except 15kW model)
- In-built global MPP scan for higher yield efficiency

Smart
- Built-in export power control
- Remote setting and upgrading
- 24h monitoring and maintenance (Optional)
- Intelligent load management - heat pump (Adapter Box required)
- Multiple monitoring methods, Pocket Wi-Fi/LAN/4G (Optional)

Safe
- IP66 protection
- Integrated SPD protection on both AC&DC

Economic
- Ultra-high power density
- Maximum 16A DC input current per string, support high power solar panels

SOLUTION DESIGN



X3-MIC G2

THREE-PHASE

	X3-MIC-3K-G2	X3-MIC-4K-G2	X3-MIC-5K-G2	X3-MIC-6K-G2	X3-MIC-8K-G2	X3-MIC-10K-G2	X3-MIC-12K-G2	X3-MIC-15K-G2
DC INPUT								
Max. PV array input power [Wp]	6000	8000	10000	12000	16000	20000	24000	30000
Max. PV input voltage [V]	1000	1000	1000	1000	1000	1000	1000	1000
Startup voltage [V]	150	150	150	150	150	150	150	150
Nominal input voltage [V]	640	640	640	640	640	640	640	640
MPP tracker voltage range [V]	120~980	120~980	120~980	120~980	120~980	120~980	120~980	120~980
No. of MPP trackers/Strings per MPP tracker	2(1/1)	2(1/1)	2(1/1)	2(1/1)	2(1/1)	2(1/1)①	2(2/1)	2(2/1)
Max. input current[A]	16/16	16/16	16/16	16/16	16/16	16/16①	32/16	32/16
Max. short circuit current[A]	20/20	20/20	20/20	20/20	20/20	20/20①	40/20	40/20
AC OUTPUT								
Nominal AC output power [W]	3000	4000	5000	6000	8000	10000	12000	15000
Nominal AC output current [A]	4.6/4.4	6.1/5.8	7.6/7.3	9.1/8.7	12.2/11.6	15.2/14.5	18.2/17.4	22.7/21.8
Max. AC output apparent power [VA]	3300	4400	5500	6600	8800	11000	13200	15000
Max. AC output current [A]	4.8	6.4	8.0	9.6	12.8	16.0	19.1	22.7
Nominal AC voltage [V]	220/380V, 230/400V, 3/N/PE							
Nominal grid frequency/Grid frequency [Hz]	50/60							
Displacement power factor	0.8 leading-0.8 lagging							
THDi (Rated power) [%]	<3							
SYSTEM DATA								
Max. efficiency [%]	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3
Euro efficiency [%]	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8
Standby consumption (night) [W]	<3							
Ingress protection	IP66							
Operating temperature range [°C]	-30~+60(Derating above 45)							
Max. operation altitude [m]	4000(Derating above 3000)							
Relative humidity [%]	0~100							
Typical noise emission [dB]	<30	<30	<30	<30	<45	<45	<50	<50
Storage temperature [°C]	-30~+60							
Dimensions (WxHxD) [mm]	342*434*144.5				342*434*156			
Weight [kg]	15.5	15.5	15.5	15.5	17	17	18	18
Cooling concept	Natural cooling				Smart fan cooling			
Communication interfaces	USB / RS485 / DRM / Pocket WiFi (Optional: Pocket LAN/4G) / Adapter box(Optional)							
PROTECTION								
Over/under voltage protection	YES							
DC isolation protection	YES							
DC reverse protection	YES							
Grid monitoring	YES							
DC injection monitoring	YES							
Back feed current monitoring	YES							
Residual current detection	YES							
Anti-islanding protection	YES							
Over temperature protection	YES							
SPD (DC/AC)	Type III / Type III							
Arc-fault circuit interrupter(AFCI)	Optional							
AC auxiliary power supply(APS)	Optional							
STANDARD								
Safety	IEC/EN 62109-1; IEC/EN 62109-2; NB/T 32004							
EMC	IEC/EN 61000; NB/T 32004							
Cetification	VDE4105; EN 50549; AS 4777.2; VDE4105; IEC 61727; IEC 62116; IEC 61683; IEC 60068; EN 50530; NB/T 32004							

① *Input 1 is optional with two strings(Max. input current: 32A, Max. short circuit current: 40A)*

**V2.3. Information may be subject to modify without notice.* 650.00003.00

X3-PRO G2

THREE-PHASE
ON-GRID INVERTER

8~30kW

Features

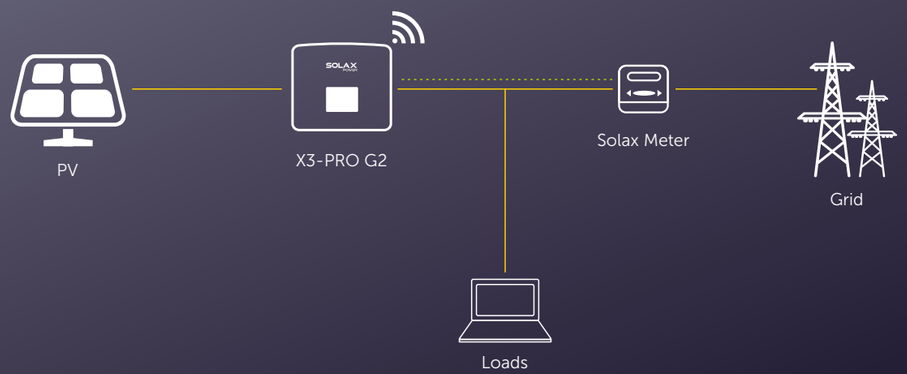
High-efficiency
- Maximum efficiency is up to 98.5%
- Low startup voltage, ultrawide MPPT voltage range
- 150% DC oversizing, 110% AC overloading output
- In-built global MPP scan for higher yield efficiency

Smart
- Built-in export power control
- Intelligent load management - heat pump (Adapter Box required)
- 24h monitoring and maintenance (Optional)
- Multiple monitoring methods, Pocket WiFi/LAN (Optional)/4G (Optional)

Safe
- SPD type II protection on both AC&DC
- ARC protection (Optional)
- IP66 protection

Economic
- Ultra-high power density
- Maximum 32A DC input current per MPP tracker, support high power solar panels
- Up to 3 MPPTs, 2 strings per MPPT
- Support Master/Slave parallel function

SOLUTION DESIGN



X3-PRO G2

THREE-PHASE

	X3-PRO-8K-G2	X3-PRO-10K-G2	X3-PRO-12K-G2	X3-PRO-15K-G2	X3-PRO-17K-G2	X3-PRO-20K-G2	X3-PRO-25K-G2	X3-PRO-30K-G2
DC INPUT								
Max. PV array input power [Wp]	12000	15000	18000	22500	25500	30000	37500	45000
Max. PV input voltage [V]	1100	1100	1100	1100	1100	1100	1100	1100
Start startup voltage [V]	200	200	200	200	200	200	200	200
Nominal input voltage [V]	650	650	650	650	650	650	650	650
MPP tracker voltage range [V]	160~980							
No. of MPP trackers	2	2	2	2	2	2	3	3
Strings per MPP tracker	2	2	2	2	2	2	2	2
Max. input current per MPPT [A]	32/32	32/32	32/32	32/32	32/32	32/32	32/32/32	32/32/32
Max. short circuit current per MPPT [A]	40/40	40/40	40/40	40/40	40/40	40/40	40/40/40	40/40/40
AC OUTPUT								
Nominal AC output power [W]	8000	10000	12000	15000	17000	20000	25000	30000
Nominal AC output current [A]	12.2/11.6	15.2/14.5	18.2/17.4	22.8/21.8	25.8/24.7	30.3/29	37.9/36.3	45.5/43.5
Max. AC output apparent power [VA]	8800	11000	13200	16500	18700	22000	27500	30000
Max. AC output current [A]	13.2	16	19.3	24.2	27.5	33.6	41.8	45.5
Nominal AC voltage [V]	220/380, 230/400, 3/N/PE, 3/PE							
Nominal grid frequency [Hz]	50/60							
Displacement power factor	0.8 leading ~ 0.8 lagging							
THDi (Rated power) [%]	<3							
SYSTEM DATA								
Max. efficiency [%]	98.20	98.20	98.20	98.30	98.30	98.30	98.50	98.50
Euro efficiency [%]	97.70	97.70	97.70	97.80	97.80	97.80	98.00	98.00
Standby consumption(Night) [W]	<3							
Ingress protection	IP66							
Operating temperature range [°C]	-30~+60 (Derating above 45)							
Max. operation altitude [m]	4000 (Derating above 3000)							
Relative humidity [%]	0~100							
Typical noise emission [dB]	<35	<35	<35	<55	<55	<55	<55	<58
Storage temperature [°C]	-30~+60							
Dimensions (WxHxD) [mm]	482x417x181							
Weight [kg]	24.5			26			28	
Cooling concept	Natural cooling			Smart fan cooling				
Communication interfaces	USB / RS485 / DRM / Pocket WiFi (Optional: Pocket LAN/4G) / Adapter box (Optional)							
PROTECTION								
Over/under voltage protection	YES							
DC isolation protection	YES							
Grid monitoring	YES							
DC injection monitoring	YES							
Residual current detection	YES							
Anti-islanding protection	YES							
Over Temp protection	YES							
SPD (DC/AC)	Type II / Type II							
AC auxiliary power supply (APS)	Optional							
Arc-fault circuit interrupter (AFCI)	Optional							
STANDARD								
Safety	IEC/EN 62109-1; IEC/EN 62109-2; NB/T 32004							
EMC	IEC/EN 61000; NB/T 32004							
Certification	VDE4105; EN 50549; AS 4777.2; VDE4105; IEC 61727; IEC 62116; IEC 61683; IEC 60068; EN 50530; NB/T 32004							

**V2.2. Information may be subject to modify without notice.* 650.00004.00

X3-MEGA G2

THREE-PHASE
ON-GRID INVERTER

40~60kW

Features

More energy harvest

- Maximum efficiency 98.4%
- 180~1000Vdc MPPT voltage range
- Maximum 6 MPPTs, 2 strings per MPP tracker
- 150% PV oversizing input, 110% overloading output
- Maximum 32A MPPT current

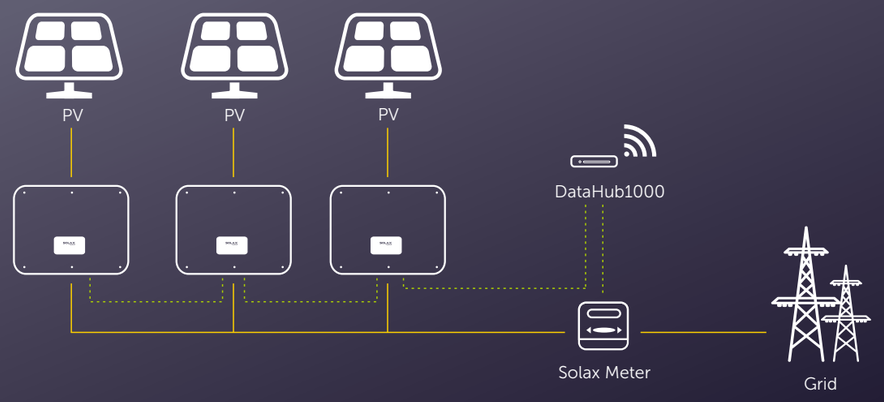
Safety & Reliability

- IP66 protection level
- AFCI protection (Optional)
- Both AC & DC SPDs (Type II) inside, Type I SPD is optional

Intelligence for easy maintenance and economy

- Built-in export power control
- Remote setting and upgrading
- Smart I-V Curve Diagnosis supported
- Aluminium AC cable connection available
- Current measuring for each of PV string
- Night-time reactive power compensation
- 24 hours operation monitoring (Optional)
- Power line communication (PLC) (Optional)
- Smart air cooling technique results in long lifetime of fans
- Advanced heat dissipation technology makes the system more than 10% lighter and smaller

SOLUTION DESIGN



X3-MEGA G2

THREE-PHASE

	X3-MGA-40K-G2	X3-MGA-50K-G2	X3-MGA-60K-G2
DC INPUT			
Max. PV array input power [kWp]	60	75	90
Max. PV input voltage [V]		1100	
Startup voltage [V]		200	
Nominal input voltage [V]		600	
MPP tracker voltage range [V]		180~1000	
No. of MPP trackers	4	5	6
Strings per MPP tracker	2	2	2
Max. input current per MPPT [A]		32	
Max. short circuit current per MPPT [A]		46	
AC OUTPUT			
Nominal AC output power [kW]	40	50	60
Nominal AC output current [A]	60.6 / 58	75.8 / 72.5	90.9 / 87
Max. AC output apparent power [kVA]	44	55	66
Max. AC output current [A]	66.7 / 63.8	83.3 / 79.7	100 / 95.7
Nominal AC voltage [V]		220/380V, 230/400V, 3/N/PE, 3/PE	
Nominal grid frequency [Hz]		50/60	
Displacement power factor		0.8 leading ~ 0.8 lagging	
THDi (Rated power) [%]		<3	
SYSTEM DATA			
Max. efficiency [%]		98.4	
Euro. efficiency [%]		98.1	
Standby consumption [W] @Night		<2	
Ingress protection		IP66	
Operating temperature range [°C]		-30~+60 (Derating above 45)	
Max. operation altitude [m]		4000 (Derating above 3000)	
Relative humidity [%]		0~100	
Dimensions [WxHxD] [mm]		630*521*286	
Weight [kg]	44	44.5	45.5
Cooling concept		Smart fan cooling	
Communication interfaces		RS485 / (Optional: Pocket WiFi/LAN/4G) / PLC(Optional) / USB	
Display		LCD (Optional) / LED*4	
PROTECTION			
Over/under voltage protection		YES	
Over current protection		YES	
DC isolation protection		YES	
Grid monitoring		YES	
DC injection monitoring		YES	
Residual current detection		YES	
Anti-islanding protection		YES	
String fault detection		YES	
Over temperature protection		YES	
SPD (DC/AC)		Type II / Type II	
Arc-fault circuit interrupter (AFCI)		Optional	
AC auxiliary power supply (APS)		Optional	
Power line communication (PLC)		Optional	
STANDARD			
Safety		IEC/EN 62109-1; IEC/EN 62109-2; NB/T 32004	
EMC		EN/IEC 61000; NB/T 32004	
Certification		VDE4105; EN 50549; AS 4777.2; VDE4105; IEC 61727; IEC 62116; IEC 61683; IEC 60068; EN 50530; NB/T 32004	

**V2.4. Information may be subject to modify without notice.* 650.00002.00

X3-FORTH

THREE-PHASE
ON-GRID INVERTER

80~150kW

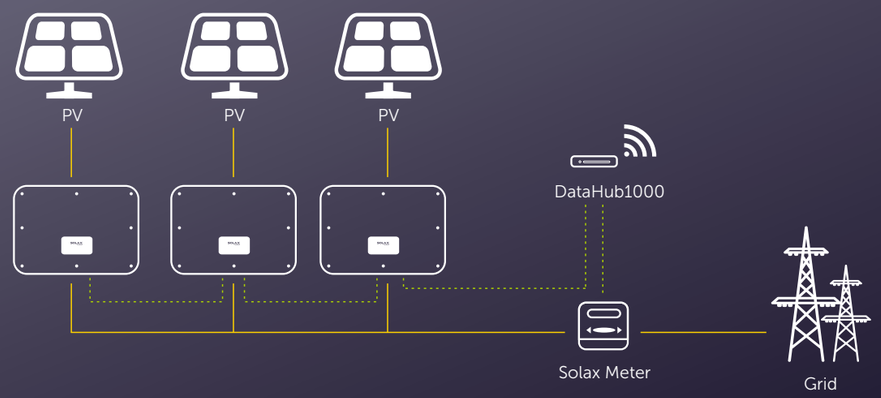
Features

More energy harvest
- Maximum efficiency up to 99%
- 180~1000Vdc MPPT voltage range
- Maximum 12 MPPTs, 2 strings per MPP tracker
- 150% PV oversizing input, 110% overloading output
- Maximum 32A MPPT current, 16A per string

Safety & Reliability
- IP66 protection level
- AFCI protection (Optional)
- AC terminal temperature detection
- Both AC&DC SPDs(Type II) inside, Type I+II SPD is optional

Intelligence for easy maintenance and economy
- Built-in export power control
- Remote setting and upgrading
- 24 hours operation monitoring
- Smart I-V Curve Diagnosis supported
- SVG functional supported
- Aluminium AC cable connection available
- Power line communication (PLC)(Optional)
- Fuse free design with smart string current monitoring
- Smart air cooling technique results in long lifetime of fans
- Advanced heat dissipation technology makes the system more than 5% lighter and smaller

SOLUTION DESIGN



X3-FORTH

THREE PHASE

	X3-FTH-80K	X3-FTH-100K	X3-FTH-110K	X3-FTH-120K	X3-FTH-125K	X3-FTH-136K-MV	X3-FTH-150K-MV
DC INPUT							
Max. PV array input power [kWp]	120	150	165	180	188	204	225
Max. PV input voltage [V]	1100	1100	1100	1100	1100	1100	1100
Startup voltage [V]	200	200	200	200	200	200	200
Nominal input voltage [V]	580/600	580/600	580/600	580/600	580/600	730/785	730/785
MPP tracker voltage range [V]	180~1000	180~1000	180~1000	180~1000	180~1000	180~1000	180~1000
No. of MPP trackers	9	9	9	12	12	12	12
Strings per MPP tracker	2						
Max. input current per MPPT [A]	32						
Max. short circuit current per MPPT [A]	46						
AC OUTPUT							
Nominal AC output power [kW]	80	100	110	120	125	136	150
Nominal AC output current [A]	121.3/116	151.6/145	166.7/159.5	181.9/174	189.4/181.2	157.1/145.4	173.2/160.4
Max. AC output apparent power [kVA]	88	110	121	132	132	149.6	165
Max. AC output current [A]	133.4/127.6	166.7/159.5	183.4/175.4	200/191.3	200/191.3	172.8/160	190.6/176.5
Nominal AC voltage[V]	220/380, 230/400, 3/N/PE, 3/PE					500/540,3P3W+PE	500/540,3P3W+PE
Nominal grid frequency [Hz]	50/60						
Displacement power factor	0.8 leading-0.8 lagging						
THDi (Rated power) [%]	<3						
SYSTEM DATA							
MPPT efficiency [%]	99.9						
Max. efficiency [%]	98.6	98.6	98.6	98.6	98.6	99.0	99.0
Ingress protection	IP66						
Operating temperature range [°C]	-30~+60 (Derating above 45)						
Max. operation altitude [m]	4000 (Derating above 3000)						
Relative humidity [%]	0~100						
Dimensions[W×H×D] [mm]	985×660×327.5						
Weight [kg]	83	83	83	87	87	87	87
Cooling concept	Smart fan cooling						
Communication interfaces	RS485 / (Optional: Pocket WiFi/LAN/4G) / PLC(Optional) / USB						
Display	LCD(Optional)/LED*4						
PROTECTION							
Over/under voltage protection	YES						
DC isolation protection	YES						
Grid monitoring	YES						
DC injection monitoring	YES						
Residual current detection	YES						
Anti-islanding protection	YES						
String fault detection	YES						
SPD (DC/AC)	Type II / Type II						
Arc-fault circuit interrupter(AFCI)	Optional						
AC terminals over temperature detection	YES						
AC auxiliary power supply(APS)	Optional						
Power line communication(PLC)	Optional						
STANDARD							
Safety	IEC/EN 62109-1; IEC/EN 62109-2; NB/T 32004						
EMC	IEC/EN 61000; NB/T 32004						
Certification	EN 50549; AS4777.2; VDE4105; IEC 61727; IEC 62116; IEC 61683; IEC 60068; EN 50530; NB/T 32004						

*V2.6 Information may be subject to modify without notice.650.00001.00

X1-HYBRID G4

D: Should be used without matebox
M: Should be used with matebox

SINGLE-PHASE

3.0~7.5kW

Features

High-efficient

- 150% PV oversized and 110% overload output
- Maximum 120% overload output
- Higher efficiency on charging and discharging, up to 97.0%
- Built-in shadow tracking function

Economic

- Maximum 16A DC input current, support for high power solar panel
- Store the surplus energy from PV to battery
- Low start output voltage makes inverter longer working time
- Less energy loss on battery to inverter

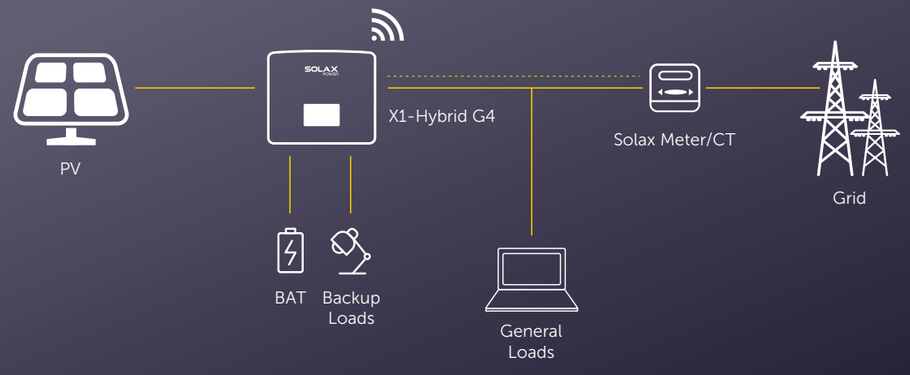
Intelligent

- Switchover time <10ms
- Quick configuration with U-disk
- Lithium & Lead-acid battery compatible
- CT compatible, loads respond within 0.3s
- Intelligent loads management(e.g., Heat pump)
- On & Off-grid parallel function, up to 15kW
- 5 work modes, 2 charging periods available
- VPP ready, ancillary service in power market

Safe

- IP65 protection level
- Integrated SPD

SOLUTION DESIGN



X1-HYBRID G4

SINGLE-PHASE

	X1-HYBRID-3.0-D X1-HYBRID-3.0-M	X1-HYBRID-3.7-D X1-HYBRID-3.7-M	X1-HYBRID-5.0-D X1-HYBRID-5.0-M	X1-HYBRID-6.0-D X1-HYBRID-6.0-M	X1-HYBRID-7.5-D X1-HYBRID-7.5-M
DC INPUT					
Max. PV array input power [Wp]	4500	5500	7500	9000	10000
Max. PV input voltage [V]	600	600	600	600	600
Start output voltage [V]	90	90	90	90	90
Nominal input voltage [V]	360	360	360	360	360
MPP voltage range [V]	70~550	70~550	70~550	70~550	70~550
No. of MPP trackers/Strings per MPP tracker	2(1/1)	2(1/1)	2(1/1)	2(1/1)	2(1/1)
Max. input current(input A/input B) [A]	16/16	16/16	16/16	16/16	16/16
Max. short circuit current(input A/input B) [A]	20/20	20/20	20/20	20/20	20/20
AC INPUT & OUTPUT					
Nominal AC output power [W]	3000	3680	5000	6000	7500
Max. AC output apparent power [VA]	3300	3680	5500	6600	7500
Max. AC output current [A]	14.4	16	23.9	28.6	32.6
Max. AC input apparent power [VA]	6300	7360	9200	9200	9200
Max. AC input current [A]	27.4	32	40	40	40
Nominal AC voltage [V]	230/240				
Nominal grid frequency [Hz]	50/60				
Displacement power factor	0.8 leading~0.8 lagging				
THDi (rated power) [%]	<2				
BATTERY DATA					
Battery type	Li-ion battery /Lead-Acid Battery(Under development)				
Battery voltage range [V]	80-480				
Max. continuous charge/discharge current [A]	30				
EPS(OFF-GRID OR BACK-UP) OUTPUT (WITH BATTERY)					
Nominal output power [W]	3000	3680	5000	6000	7500
Peak apparent power [VA]	3600, 1h	3680	6000, 1h	7200, 10min	7500
Max. continous current [A]	13	16	21.7	26.1	32.6
Nominal voltage[V]; Frequency [Hz]	230; 50/60				
Switch time [ms]	<10				
Parallel operation	YES				
SYSTEM DATA					
Max. efficiency [%]	97.6				
Euro. efficiency [%]	97.0				
Battery charge/discharge effciency [%]*1	97.0/97.0				
Standby consumption [W] @Night	<3				
Degree of protection	IP65				
Operating temperature range [°C]	-35~+60 (Derating above 45°C)				
Max. operation altitude [m]	<3000				
Relative humidity [%]	0~100				
Typical noise emission [dB]	<30	<30	<30	<30	<45
Storage temperature [°C]	-40~+65				
Dimensions(W×H×D) [mm]	482×417×181				
Net weight [kg]	24	24	24	24	25
Cooling concept	Nature cooling	Nature cooling	Nature cooling	Nature cooling	Smart cooling
Communication interfaces	CT/ Meter(optional)/ External control Rs485/ Pocket WiFi(Optional: Pocket Lan/4G)/ DRM/ USB Upgrade/ NTC				
STANDARD					
Safety	EN/IEC62109-1/-2				
EMC	EN61000-6-1/2/3/4;EN61000-3-2/3/11/12				
Certification	VDE4105 /G99 /G98 / AS4777 / EN50549/ CEI 0-21 /IEC61727/RD1699/NRS 097-2-1/PEA/MEA/VFR2019				

*1: PV to BAT Max. efficiency 97.0%, BAT to AC Max. efficiency 97.0%

X3-HYBRID G4

D: Should be used without matebox
M: Should be used with matebox

THREE-PHASE
HYBRID INVERTER

5.0~15kW

Features

High-efficient

- 150% PV oversized and 110% overload output
- Maximum 150% overload output
- Higher efficiency on charging and discharging, up to 97.5%
- Built-in shadow tracking function

Economic

- Maximum 16A DC input current, support for high power solar panel
- Store the surplus energy from PV to battery
- Low start output voltage makes inverter longer working time
- Less energy loss on battery to inverter

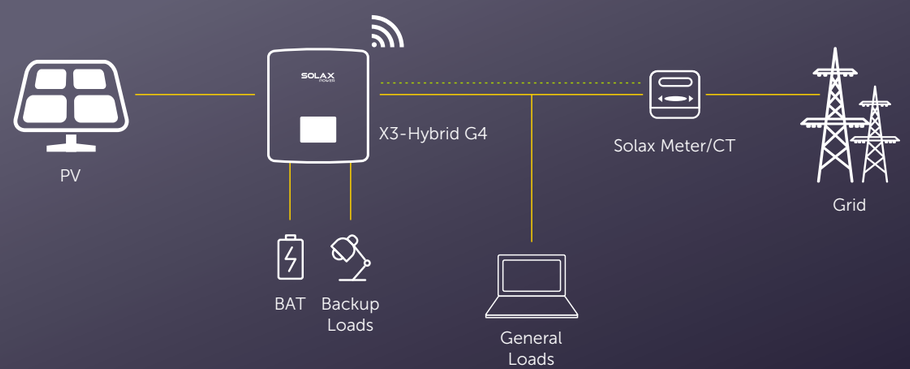
Intelligent

- Switchover time <10ms
- Quick configuration with U-disk
- Lithium & Lead-acid battery compatible
- CT compatible, loads respond within 0.3s
- Intelligent loads management(e.g., Heat pump)
- On & Off-grid parallel function, up to 150kW
- 5 work modes, 2 charging periods available
- VPP ready, ancillary service in power market
- Three-phase unbalanced output 50% nominal output power on single phase at most

Safe

- IP65 protection level
- Integrated SPD

SOLUTION DESIGN



X3-HYBRID G4

THREE-PHASE

	X3-HYBRID-5.0-D X3-HYBRID-5.0-M	X3-HYBRID-6.0-D X3-HYBRID-6.0-M	X3-HYBRID-8.0-D X3-HYBRID-8.0-M	X3-HYBRID-10.0-D X3-HYBRID-10.0-M	X3-HYBRID-12.0-D X3-HYBRID-12.0-M	X3-HYBRID-15.0-D X3-HYBRID-15.0-M
DC INPUT						
Max. PV array input power [Wp]	8000	10000	12000	15000	18000	18000
Max. PV input voltage [V]	1000	1000	1000	1000	1000	1000
Start output voltage [V]	200	200	200	200	200	200
Nominal input voltage [V]	640	640	640	640	640	640
MPP voltage range [V]	180~950	180~950	180~950	180~950	180~950	180~950
No. of MPP trackers/Strings per MPP tracker	2(1/1)	2(1/1)	2(2/1)	2(2/1)	2(2/1)	2(2/1)
Max. input current(input A/input B) [A]	16/16	16/16	26/16	26/16	26/16	26/16
Max. short circuit current(input A/input B) [A]	20/20	20/20	30/20	30/20	30/20	30/20
AC INPUT & OUTPUT						
Nominal AC output power [W]	5000	6000	8000	10000	12000	15000
Max. AC output apparent power [VA]	5500	6600	8800	11000	13200	15000
Max. AC output current [A]	8.1	9.7	12.9	16.1	19.3	24.1
Max. AC input apparent power [VA]	10000	12000	16000	20000	20000	20000
Max. AC input current [A]	16.1	19.3	25.8	32.0	32.0	32.0
Nominal AC voltage [V]	415/240; 400/230; 380/220					
Nominal grid frequency [Hz]	50/60					
Displacement power factor	0.8 leading~0.8 lagging					
THDi (rated power) [%]	<3					
BATTERY DATA						
Battery type	Li-ion battery/Lead-Acid Battery(Under development)					
Battery voltage range [V]	180~650					
Max. continuous charge/discharge current [A]	30					
EPS(OFF-GRID OR BACK-UP) OUTPUT (WITH BATTERY)						
Nominal output power [W]	5000	6000	8000	10000	12000	15000
Peak apparent power [VA]	7500, 60s	9000, 60s	12000, 60s	15000, 60s	15000, 60s	16500, 60s
Max.continous current [A]	7.2	8.7	11.6	14.5	17.5	21.8
Nominal voltage[V]; Frequency [Hz]	400/230; 50/60					
Switch time [ms]	<10					
Parallel operation	YES					
SYSTEM DATA						
Max. efficiency [%]	98.0					
Euro. efficiency [%]	97.7					
Battery charge/discharge effciency [%]*1	98.5/97.5					
Standby consumption [W] @Night	<5					
Degree of protection	IP65					
Operating temperature range [°C]	-35~60 (Derating above +45°C)					
Max. operation altitude [m]	<3000					
Relative humidity [%]	0~100					
Typical noise emission [dB]	<35	<35	<35	<35	<45	<45
Storage temperature [°C]	-40~+70					
Dimensions (W×H×D) [mm]	503x503x199					
Net weight [kg]	30					
Cooling concept	Nature cooling	Nature cooling	Nature cooling	Nature cooling	Smart cooling	Smart cooling
Communication interfaces	CT/ Meter(optional)/ External control RS485/ Pocket WiFi(Optional: Pocket Lan/4G)/ DRM/ USB Upgrade/NTC(optional)					
STANDARD						
Safety	EN/IEC62109-1/-2					
EMC	EN61000-6-1/2/3/4;EN61000-3-2/3/11/12					
Certification	VDE4105 /G99 /G98 / AS4777 / EN50549/ CEI 0-21 /IEC61727/PEA/MEA/NRS-097-2-1/RD1699/TOR					

*1: PV to BAT Max. efficiency 98.5%, BAT to AC Max. efficiency 97.5%.

V2.1. Information may be subject to modify without notice. 650.00010.00

X1-FIT G4

SINGLE-PHASE
AC COUPLED HYBRID INVERTER

3.0~7.5kW

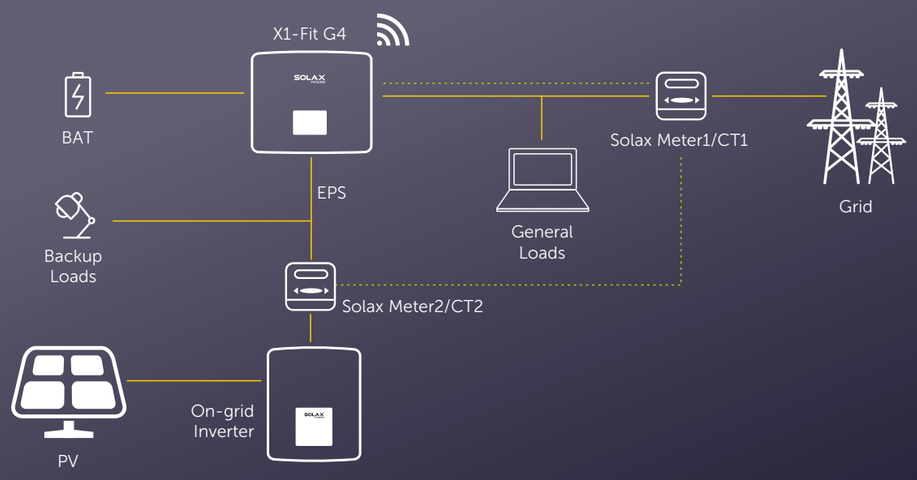
Features

High-efficient
- 110% overload output in on-grid situation
- Maximum 120% overload output in off-grid situation for one hour
- Higher efficiency on charging and discharging, up to 97.0%

Economic
- Store the surplus energy to battery
- Less energy loss on battery to inverter

Safe
- IP65 protection level
- Integrated SPD

Intelligent
- Switchover time <10ms
- Quick configuration with U-disk
- Lithium & Lead-acid battery compatible
- CT compatible, loads respond within 0.3s
- Intelligent loads management(e.g., Heat pump)
- On & Off-grid parallel function, up to 15kW
- 5 work modes, 2 charging periods available
- VPP ready, ancillary service in power market



SOLUTION DESIGN

X1-FIT G4

SINGLE-PHASE

	X1-FIT-3.7-W	X1-FIT-5.0-W	X1-FIT-6.0-W	X1-FIT-7.5-W
AC INPUT & OUTPUT				
Nominal AC output power [W]	3680	5000	6000	7500
Max. AC output apparent power [VA]	3680	5500(4600 for VDE4105, 4999 for AS4777, 5000 for C10/11)	6600	7500
Max. AC output current [A]	16	23.9	28.6	32.6
Max. AC input apparent power [VA]	7360	9200	9200	9200
Max. AC input current [A]	32	40	40	40
Nominal AC voltage	220 / 230 / 240			
Nominal grid frequency [Hz]	50 / 60			
Displacement power factor	0.8 leading~0.8 lagging			
THDi,rated power [%]	<2			
BATTERY DATA				
Battery Type	Li-ion battery / Lead acid battery			
Battery voltage range [V]	80~480			
Max.continuous charge/discharge current [A]	30			
EPS(OFF-GRID OR BACK-UP) OUTPUT (WITH BATTERY)				
Nominal output power [W]	3680	5000	6000	7500
Peak apparent power [VA, min]	4416, 60	6000, 60	7200, 10	7500
Max.continous current [A]	16	21.7	26.1	32.6
Nominal Voltage[V]; Frequency [Hz]	230; 50 / 60			
Switch time [ms]	<10			
Parallel Operation	YES			
SYSTEM DATA				
Battery charge/discharge effciency [%]	97.0 / 97.0			
Standby consumption [W] @Night	<3			
Degree of protection	IP65			
Operating temperature range [°C]	-35～+60 (Derating above +45)			
Max. operation altitude [m]	<3000			
Relative humidity [%]	0～100			
Typical noise emission [dB]	<30	<30	<30	<45
Storage temperature [°C]	-40～70			
Dimensions [W×H×D] [mm]	482×417×181			
Net Weight [kg]	23			
Cooling concept	Natural cooling	Natural cooling	Natural cooling	Smart cooling
Communication interfaces	CT/ Meter(optional) / External control RS485 / Pocket series (optional) / DRM / USB Upgrade			
STANDARD				
Safety	EN/IEC62109-1/-2			
EMC	EN61000-6-1/2/3/4, EN61000-3-2/3/11/12			
Certification	VDE4105 / G99 / G98 / AS4777 / EN50549 / CEI 0-21 / IEC61727/ C10/11			

**V2.4. Information may be subject to modify without notice.*650.00018.00

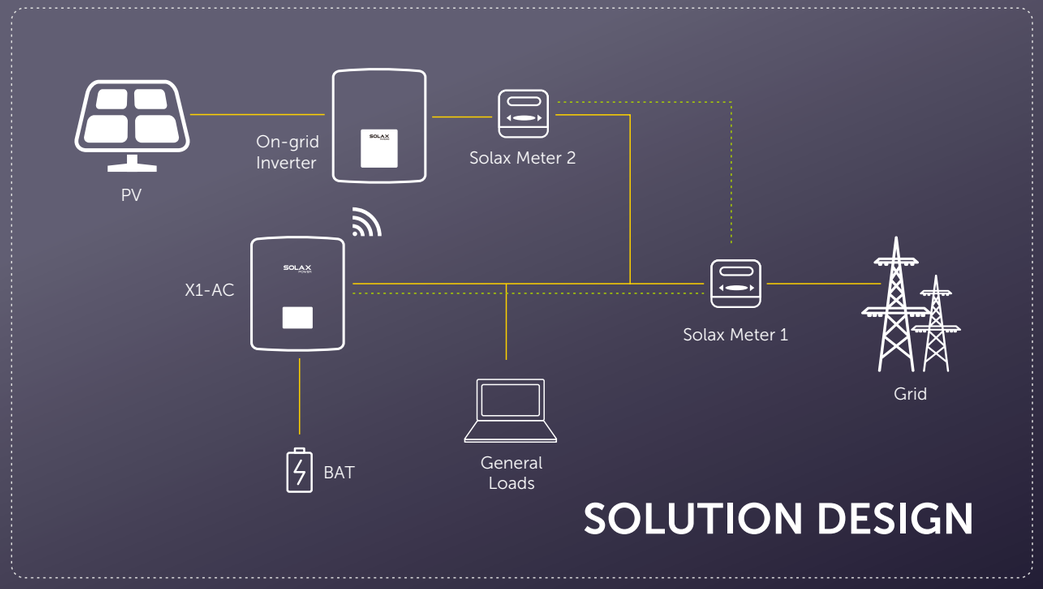
X1-AC

SINGLE-PHASE
AC COUPLED HYBRID INVERTER

3.0~5.0kW

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
AC INPUT & OUTPUT				
Nominal AC output power [W]	3000	3680	4600	4999
Nominal AC output current [A]	13	16	20	21.7
Max. AC output apparent power [VA]	3000	3680	4600	4999
Max. AC output current [A]	13.6	16.8(16 for G98)	21	21.7
Max. AC input apparent power [VA]	3000	3680	4600	4999
Max. AC input current [A]	13.6	16.8(16 for G98)	21	21.7
Nominal AC voltage [V]	220/230/240 (180 - 280)			
Nominal grid frequency/Grid frequency range [Hz]	50/60			
Displacement power factor	0.8 leading~0.8 lagging			
THDi (rated power) [%]	<2			
BATTERY DATA				
Battery type	Li-ion battery /Lead-acid battery			
Battery voltage range [V]	70-400			
Max.continuous charge/discharge current [A]	35			
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			
SYSTEM DATA				
Max. efficiency [%]	96.5		97.0	
Battery charge/discharge effciency [%]	96.5		97.0	
Degree of protection	IP 65			
Operating temperature range [°C]	-25 ~ +60 (derating at 45)			
Max. operation altitude [m]	<2000			
Humidity [%]	0~100			
Typical noise emission [dB]	<25			
Storage temperature [°C]	-25 ~ +60			
Dimensions(WxHxD) [mm]	430*341.5*143			
Net weight [kg]	15.5	15.5	16.3	16.3
Cooling concept	Nature cooling			
Communication interfaces	Meter/Pocket Wi-Fi(optional)/Pocket LAN(optional)/Pocket GPRS(optional)/RS485/DRM/USB/CT			
STANDARD				
Safety	IEC62477			
EMC	EN 61000-6-1 / EN 61000-6-2 / EN 61000-6-3 / EN 61000-6-4			
Certification	G98/G99/G100			

X3-FIT G4

THREE-PHASE
AC COUPLED HYBRID INVERTER

6.0~15kW

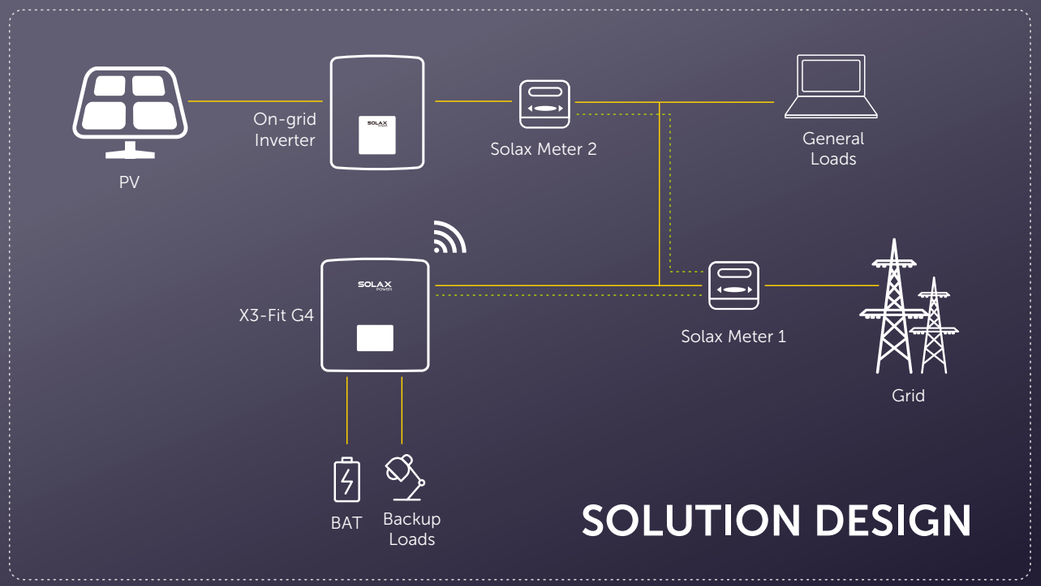
Features

High-efficient
- 110% overload output in on-grid situation
- Maximum 150% overload output
- Higher efficiency on charging and discharging, up to 98.5%

Economic
- Store the surplus energy to battery
- Less energy loss on battery to inverte

Safe
- IP65 protection level
- Integrated SPD

Intelligent
- Switchover time <10ms
- Quick configuration with U-disk
- Lithium & Lead-acid battery compatible
- CT compatible, loads respond within 0.3s
- Intelligent loads management(e.g., Heat pump)
- On & Off-grid parallel function, up to 150kW
- 5 work modes, 2 charging periods available
- VPP ready, ancillary service in power market



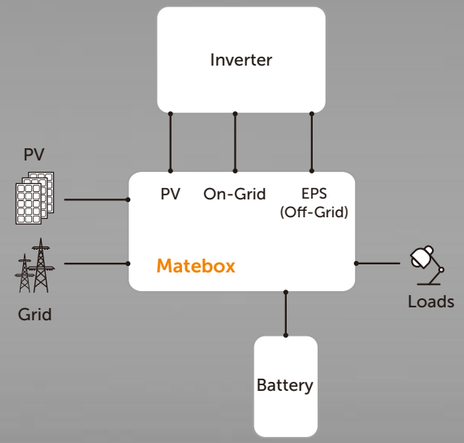
SOLUTION DESIGN

X3-FIT G4

THREE-PHASE

	X3-FIT-6.0-W	X3-FIT-8.0-W	X3-FIT-10.0-W	X3-FIT-15.0-W
AC INPUT & OUTPUT				
Nominal AC output power [W]	6000	8000	10000	15000
Max. AC output apparent power [VA]	6600	8800	11000	15000
Max. AC output current [A]	9.7	12.9	16.1	24.1
Max. AC input apparent power [VA]	12000	16000	20000	20000
Max. AC input current [A]	19.3	25.8	32	32
Nominal AC voltage [V]	380 / 220; 400 / 230; 415 / 240			
Nominal grid frequency [Hz]	50 / 60			
Displacement power factor	0.8 leading~0.8 lagging			
THDi (rated power) [%]	<3			
BATTERY DATA				
Battery type	Li-ion battery/Lead-Acid Battery			
Battery voltage range [V]	180~800			
Max. continuous charge/discharge current [A]	30			
EPS(OFF-GRID OR BACK-UP) OUTPUT (WITH BATTERY)				
Nominal output power [W]	6000	8000	10000	15000
Peak apparent power [VA,s]	9000,60	12000,60	15000,60	16500,60
Max.continous current [A]	8.7	11.6	14.5	21.8
Nominal voltage[V]; Frequency [Hz]	400 / 230; 50 / 60			
Switch time [ms]	<10			
Parallel operation	YES			
SYSTEM DATA				
Battery charge/discharge effciency [%]*1	98.5 / 97.5			
Standby consumption [W] @Night	<5			
Degree of protection	IP65			
Operating temperature range [°C]	-35~60 (Derating above +45)			
Max. operation altitude [m]	<3000			
Relative humidity [%]	0~100			
Typical noise emission [dB]	<35	<35	<45	<45
Storage temperature [°C]	-40~+70			
Dimensions(W×H×D) [mm]	503x503x199			
Net weight [kg]	30			
Cooling concept	Natural cooling	Natural cooling	Nature cooling	Smart cooling
Communication interfaces	CT/ Meter(optional)/ External control RS485/ Pocket WiFi(Optional: Pocket Lan/4G)/ DRM/ USB Upgrade/NTC(optional)			
STANDARD				
Safety	EN / IEC62109-1/-2			
EMC	EN61000-6-1/2/3/4;EN61000-3-2/3/11/12			
Certification	VDE4105 / G99 / G98 / AS4777 / EN50549 / CEI 0-21 / IEC61727 / PEA/MEA / NRS-097-2-1 / RD1699 / TOR			

**V2.3. Information may be subject to modify without notice.650.00019.00*



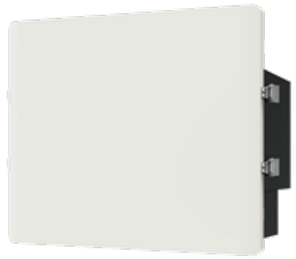
MATEBOX

For the new X-ESS G4, we get rid of the complicated wiring work by laying all the wires in the Matebox. All you need to do is just to install one module on the top of another, and connect all the cables which are already well-sorted in the Matebox in different ports.

PV	
Max. input voltage [Vdc]	600
Max. short circuit current (A/B) [A]	18/18
BATTERY	
Battery voltage range [V]	80-480
Max. charge/discharge current [A]	30
ON-GRID(Inverter)	
Rated voltage [Vac], frequency [Hz]	220/230/240, 50/60
Max. on-grid current [A]	32.6
OFF-GRID(Inverter)	
Rated voltage [Vac], frequency [Hz]	230, 50/60
Rated current [A]	32.6
GRID(Utility)	
Rated grid voltage [Vac], frequency [Hz]	220/230/240, 50/60
Max. input current [A]	60
LOAD	
Rated voltage [Vac], frequency [Hz]	220/230/240, 50/60
Max. current [A]	60
ENVIRONMENT LIMIT	
Degree of protection	IP54
Protection class	Class I
Operating temperature range [°C]	-25~+60°C (Derating above +45°C)
Storage temperature [°C]	-40~+70°C
Relative humidity [%]	0~100 (condensing)
Altitude[m]	<3000
Overvoltage category	III(AC), II(DC)
OTHER	
Cooling concept	Nature cooling
DIMENSION AND WEIGHT	
Dimensions [mm]	482x437x185
Net weight [kg]	10.5

X1-MATEBOX

X3-MATEBOX BASIC



PV	
Max. input voltage [Vdc]	1000
Max. short circuit current (A/B)[A]	30/18
BATTERY	
Battery voltage range [V]	180~650
Max. charge/discharge current [A]	30
ON-GRID (Inverter)	
Rated voltage[Vac], frequency [Hz]	380/400/415, 50/60
Max. Grid (INV) input/output current [A]	32/32
OFF-GRID (Inverter)	
Rated voltage [Vac], frequency [Hz]	380/400/415, 50/60
Max. current [A]	24.1
GRID (Utility)	
Rated grid voltage [Vac], frequency [Hz]	380/400/415, 50/60
Max. input/output current [A]	32/32
LOAD	
Rated voltage[Vac], frequency [Hz]	380/400/415, 50/60
Max. current [A]	24.1
ENVIRONMENT LIMIT	
Degree of protection	IP54
Protection class	Class I
Operating temperature range [°C]	-25~+60°C (Derating above +45°C)
Storage temperature [°C]	-40~+70°C
Relative humidity [%]	0~100
Altitude [m]	<3000
Overvoltage category	III(AC), II(DC)
OTHER	
Cooling concept	Nature cooling
DIMENSION AND WEIGHT	
Dimensions [mm]	533x397x204
Net weight [kg]	7.5

X3-MATEBOX ADVANCED

PV	
Max. input voltage [Vdc]	1000
Max. short circuit current (A/B) [A]	30/18
BATTERY	
Battery voltage range [V]	180~650
Max. charge/discharge current [A]	30
ON-GRID (Inverter)	
Rated voltage[Vac], frequency [Hz]	380/400/415, 50/60
Max. Grid (INV) input/output current [A]	24.1/24.1
OFF-GRID (Inverter)	
Rated voltage [Vac], frequency [Hz]	380/400/415, 50/60
Max. current [A]	24.1
GRID (Utility)	
Rated grid voltage [Vac], frequency [Hz]	380/400/415, 50/60
Max. input/output current [A]	63/24.1
LOAD	
Rated voltage [Vac], frequency [Hz]	380/400/415, 50/60
Max. current [A]	63
ENVIRONMENT LIMIT	
Degree of protection	IP54
Protection class	Class I
Operating temperature range [°C]	-25~+60°C (Derating above +45°C)
Storage temperature [°C]	-40~+70°C
Relative humidity [%]	0~100
Altitude [m]	<3000
Overvoltage category	III (AC), II (DC)
OTHER	
Cooling concept	Nature cooling
DIMENSION AND WEIGHT	
Dimensions [mm]	551x512x204
Net weight [kg]	14.5

TRIPLE POWER 3.0 BATTERY

- Systematic design, in-depth optimization and seamless connection with Solax Hybrid inverter
- Safest type of $LiFePO_4$ battery, an adoption of high-performance processors, international brand devices, better stability
- Unique battery heating technology, which is capable to work at low temperature
- Long life cycle, more than 6000 times
- Safety Cert. TUV, CE, UL, UN38.3 and so on
- Remote fault diagnosis, upgrade and maintenance
- Auto power replenishment technology is adopted to prevent battery over-discharge
- Multiple communication interfaces: RS485, CAN
- Modular stacking design, easy installation, supporting floor and wall mounting
- IP65, supporting indoor and outdoor installation

MC0600 ➡

HV10230 ➡

	T-BAT-SYS-HV-3.0	T-BAT-SYS-HV-6.0	T-BAT-SYS-HV-9.0	T-BAT-SYS-HV-12.0
Nominal voltage [V]	102.4	204.8	307.2	409.6
Operating voltage range [V]	90~116	180~232	270~348	360~464
Total energy [kWh]	3.0	6.1	9.2	12.2
Usable energy[1] [kWh]	2.7	5.5	8.3	10.9
Rated capacity [Ah]	30			
Nominal power [kW]	2.5	5.1	7.6	10.2
Max. power [kW]	3.0	6.1	9.2	12.2
Recommend charge/discharge current [A]	25			
Max. charge/discharge current [A]	30			
Battery roundtrip efficiency	95%			
Cycle life [90% DOD]	6000 Cycles			
Expected life time / Warranty [year]	10			
Available charge/discharge temperature range [°C]	-30 to 50			
Storage temperature [°C]	-20 to 50 (3 months)			
Relative humidity [%]	0~100			
Altitude [m]	Below 3000			
Degree of protection	IP65			
Battery to Inverter	RS485/CAN2.0			
Battery to battery/BMS	CAN2.0			
Master control capacity indicator	4LED (25%, 50%, 75%, 100%)			
Master control LED indicator (Working mode)	1 LED			
System switch (on/off)	Buttonx1+Breakerx1			
Certificate	CE/IEC62619/UN38.3/IEC62040/UKCA			
Hazardous materials classification	Class 9			
Dimensions (W × H × D) [mm]	MC0600: 482.5x173.5x153 HV10230: 482.5x471.5x153			
Net weight [kg]	MC0600: 7.5kg +HV10230: 34.5kg	MC0600: 7.5kg +2xHV10230: 69kg	MC0600: 7.5kg +3xHV10230: 103.5kg	MC0600: 7.5kg +4xHV10230: 138kg

[1] Test conditions: 90% DOD, 0.2C charger & discharger @+25°C
* MC0600: Master Box (one MC0600 can be connected 1~4 HV10230)
* HV10230: Slave Battery Pack
* Max charge/discharge current may be variant with different inverter model

V2.0. Information may be subject to modify without notice.
650.00011.00

T-BAT SYS-HV

- Systematic design, in-depth optimization and seamless connection with Solax Hybrid inverter
- Safest type of $LiFePO_4$ battery, an adoption of high-performance processors,international brand devices,better stability
- Long life cycle, more than 6000 times
- Safety Cert. TUV, CE, UL, UN38.3 and so on
- Remote fault diagnosis, upgrade and maintenance
- Auto power replenishment technology is adopted to prevent battery over-discharge
- Multiple communication interfaces: RS485, CAN
- Parallel function for expansion, with maximum of 8 pcs
- Floor or wall mounting
- IP55, supporting indoor and outdoor installation

T-BAT H 5.8

HV11550

	T-BAT H 5.8	T-BAT H 11.5	T-BAT H 17.3	T-BAT H 23
Nominal Voltage [V]	115.2	230.4	345.6	460.8
Operating Voltage [V]	100-131	200-262	300-393	400-524
Battery Type	Li-ion (LFP)	Li-ion (LFP)	Li-ion (LFP)	Li-ion (LFP)
Total Capacity [kWh]	5.8	11.5	17.3	23.0
Usable Capacity[1] [kWh]	5.1	10.4	15.5	20.7
Faradic Charge Eciency [%]	99	99	99	99
Battery Roundtrip Eciency [%]	95	95	95	95
Standard Power [kW]	2.8	5.7	8.6	11.5
Max Power [kW]	4.0	8.0	12.0	16.1
Recommend Charge/Discharge Current [A]	25	25	25	25
Max Charge/Discharge Current [A]	35	35	35	35
Short Circuit Current[A]	760	760	760	760
Cycle Life	>6000 Cycles	>6000 Cycles	>6000 Cycles	>6000 Cycles
Warranty [Year]	10	10	10	10
Available Operating Temperature Range [°C]	0 to 55			
Full-load Operating Temperature Range [°C]	5 to 48			
Relative Humidity [%]	4 to 100 (condensing)			
Altitude [m]	Below 2000			
Protection	IP55			
System to Inverter	CAN2.0			
Battery to Battery/BMS	RS485			
Data Collection Port /FW UPDATE	CAN2.0			
Master Control Working Mode Indicator	1 LED			
Master Control Capacity Indicator	4LED (25%, 50%, 75% 100%)			
Battery Module LED	2 LED			
Reset	Button			
Switch ON/OFF	Buttonx1 + breakerx1			
Safety	CE, RCM, IEC62619, UL1973, ROHS, REACH			
UN Number	UN3840			
Hazardous Materials Classification	Class 9			
Transport Testing Requirement	UN38.3			
Dimensions (L x W x H) [mm]	474x193x708	474x193x708+474x193x647	474x193x708+(474x193x647)x2	474x193x708+(474x193x647)x3
Weight [kg]	72.2	72.2+68.5	72.2+68.5x2	72.2+68.5x3

[1] Test conditions: 90% DOD, 0.2C charger & discharger @+25°C
The Triple Power battery could be scalable up to 4 modules, for a total of 23.0kWh.
Indoor installation only
system Usable Energy may be variant with dierent inverter models
Max Charge/Discharge Current may be variant with dierent inverter models

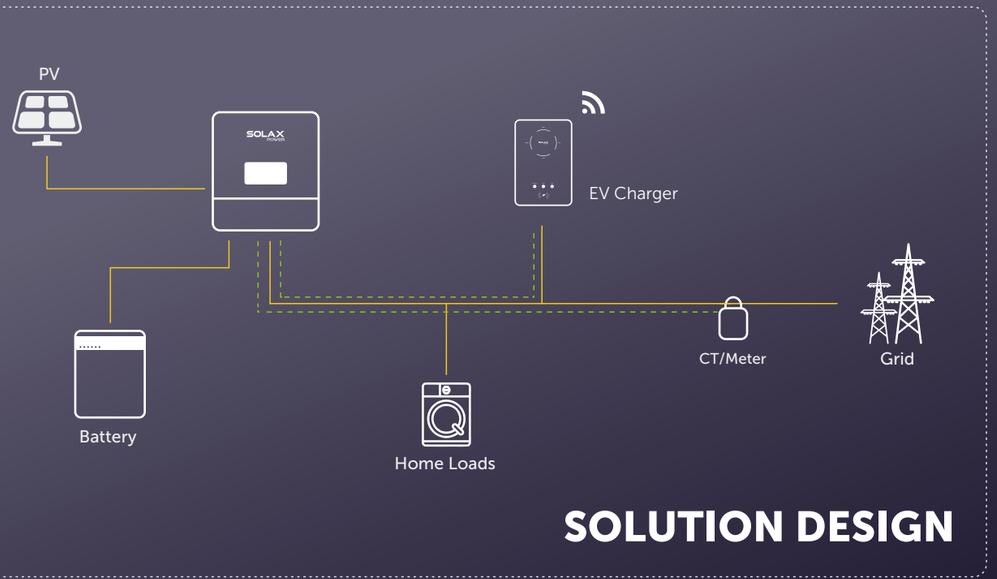
*V2.0. Information may be subject to change without notice.
650.00012.00

SMART EV CHARGER

X1-EVC-7.2K
X3-EVC-11K / X3-EVC-22K

Features

- Plug or socket outlet selectable
- Built-in 30mA type A RCD and 6mA DC protection
- Integrated with PEN protection and no earth rod
- Encrypted communication based on TLS
- Indoor and outdoor easy installation
- Form an intelligent photovoltaic, storage and EV charging energy system through the communication between the smart EV charger and SolaX Power inverter.
- Capable with 100% green energy generated from your solar or wind generation.
- Integrated RFID function
- Remote setting and monitoring with APP and website
- Smart dynamic load balance control
- Set timers to reduce your cost during peak and valley price



SOLUTION DESIGN

SMART EV CHARGER

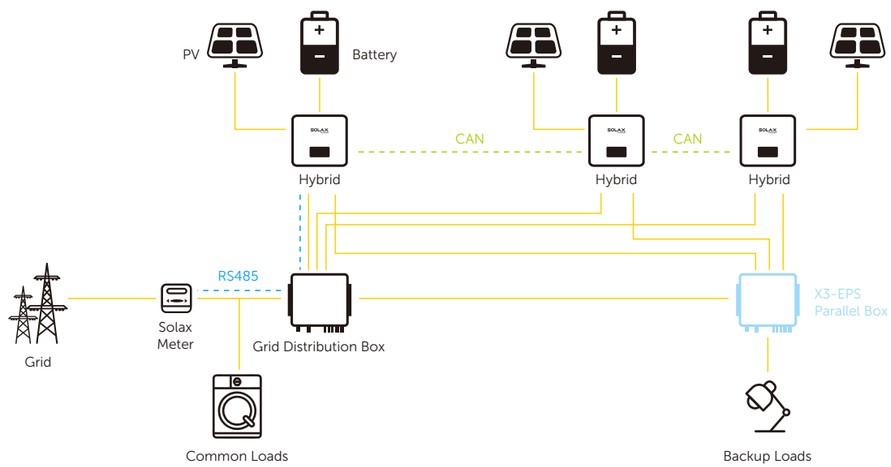
		X1-EVC-7.2K	X3-EVC-11K	X3-EVC-22K
AC NOMINAL INPUT	Phases/Lines	Single phase	Three phase	Three phase
	Voltage [V]	230; 1/N/PE	230/400; 3/N/PE	230/400; 3/N/PE
	Frequency [Hz]	50/60; ±5	50/60; ±5	50/60; ±5
AC NOMINAL OUTPUT	Voltage [V]	230; 1/N/PE	230/400; 3/N/PE	230/400; 3/N/PE
	Current [A]	32	16	32
	Power [kW]	7.2	11	22
INTERFACE	Wireless Module	Wi-Fi 2.4GHz		
	RS485	YES		
	RFID	YES		
	OCPP 1.6 (JSON)	Optional		
	LCD Screen	Optional		
	CT Clamps	X1	x3	X3
GENERAL DATA	Housing Material	Plastic/Metal		
	Installation Method	Wall-mount		
	Wall-mount Bracket	YES		
	Charging Outlet	Type P(Charging cable with plug)/Type S(Socket-outlet)		
	Cable Length [m]	6.5		
	Operating Temperature [OC]	-30 ~ 50		
	Working Humidity [%]	5%~95% without condensation		
	Working Altitude [m]	<2000		
	Degree of Protection	IP65		
	Application Site	Indoor/Outdoor		
	Cooling Concept	Natural cooling		
	Dimension(WxHxD) [mm]	249*370*155(for type S)/265*370*155(for type P)		
	Net Weigth [kg]	7(for type S)/10.5(for type P)		
SECURITY PROTECTION	Multiple Protection	Over/Under voltage protection, Overload protection, Shortcircuit protection, Current leakage protection, Grounding protection, Surge protection, Overtemperature protection		
	Integral Earth Leakage Protection Integral	30mA Type A RCD (EN 61008) + 6mA DC protection (EN 62955)		
	Encrypted Communication	TLS		
	Safety Standard	IEC 61851-1:2017, IEC 62196-2:2016		
	Built-in PEN fault technology	YES		
	Warranty [years]	3 (5 optional)		
ADVANCED FUNCTIONS	Charging mode	**Green Mode:** The main purpose of Green mode is to charge the EV with PV energy as much as possible. The default level is 6A, in which the Smart EV Charger will never take electricity from the grid, while there is another 3A level, capable to purchase a little electricity from the grid but no more than 3A. In the Green mode, the minimum charging current is 6A. This work mode will spend all its effort to help clients reduce the cost of buying electricity from the grid. ECO Mode: ECO mode help users to charge their EV with a fixed power while the energy will also from the PV as much as possible. The gap will be supplied by the grid. The charging current can be set thus control the output power. For example, the users set the charging current 16A. If the current from the inverter is only 10A then the rest would be taken from the grid as 6A. If the current from the inverter is 18A, then the Smart EV Charger will output 18A. **Fast Mode:** Will charge the EV at the fastest rate and will import grid electricity if there is insufficient surplus generated power. The max charging power will be the minimum value of the rated power and the current grid limit power.		
	Smart boost	With Smart Boost function, the Smart EV Charger will spend all its effort to use the PV energy as much as possible. Users could set an "End Time" and "Charge Energy", the Smart EV Charger will automatically output the power according to the rest time and rest energy and this part of energy will be taken from PV, if any, in the first place.		
	Timer Boost	Users, when enable the "Timer Boost" function, are able to set a period of time, during which the Smart EV charger will charge the EV as fast as it can no matter in which work mode.		
	Dynamic load balancing	Full dynamic load balancing allows you to charge as fast as possible at your charging mode, protects the main fuse and ensures that you can use your electricity wherever it's needed.		

*V2.1. Information may be subject to modify without notice. *650.00017.00*

X3-EPS PARALLEL BOX G2

- Simple: Convenient wiring
- Reliable: Provide reliable backup power in parallel

	X3-PBOX-60kW-G2	X3-PBOX-150kW-G2
GRID (INVERTER)		
Grid connection	Three Phase	
Rated voltage	220/380V,230/400V,240/415V	
AC frequency	50/60Hz	
AC output voltage range	(198~253)/(342~40)V	
Maximum grid input current	87A	87A
EPS (INVERTER)		
Rated voltage	230/400VA	
EPS frequency	50/60Hz	
Compatible inverter	≤6	5~10
Maximum EPS input current per channel	21.7A	21.7A
Maximum EPS input current	87A	217A
LOAD (BACKUP)		
Load connection	Single Phase/Three Phase	
Rated voltage	220/380V,230/400V,240/415V	
AC frequency	50/60Hz	
Maximum apparent power	60kVA	150kVA
Maximum output current	87A	217A
Switchover time	<10s	
GENERAL SPECIFICATION		
Operating temperature range	-25°C to +40°C (-13°F to +104°F)	
Relative humidity range	0～100 (condensing)	
Dimensions (W × H × D)	492 x 478 x 183 mm (19.4 x 18.8 x 7.2 inch)	776 x 740 x 234 mm (30.6 x 29.1 x 9.2 inch)
Weight	17kg	41kg
Degree of protection	Ip65	



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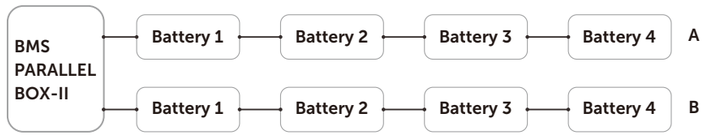
BMS-PARALLEL BOX-II



Features

BMS-Parallel Box-II is an revolutionary product that makes the capacity expansion of storage system possible. With the box, users are able to easily expand the number of T-BAT H 5.8 to 8 from 4 with X3-Hybrid series and to 6 from 3 with X1-Hybrid series. Besides, alternate using dual-module makes the life cycle of batteries longer and prevents the inverter from stopping working caused by the errors in one series.

ENVIRONMENT REQUIREMENT								
Operating charge/discharge temperature range [°C]	0 ~ 55							
Full-load charge/discharge temperature range [°C]	5 ~ 48							
Storage temperature [°C]	-20 ~ +55 (3 months) 0 ~ 40 (1 year)							
Humidity [%]	0 ~ 100 (condensing)							
Altitude [m]	≤ 2000							
Degree of protection	IP55							
COMMUNICATION								
System to inverter	CAN2.0/RS485							
Battery to battery/BMS	RS485							
Master control LED indicator working mode	3LED							
Master control capacity indicator	2*4LED (25%, 50%, 75%, 100%)							
Battery module LED	2 LED							
Switch on/off	Button*1+breaker*1							
CERTIFICATION								
Safety	IEC 62477-1, IEC 61439-1, IEC 61439-2							
EMC	IEC 61000-6-1/2/3/4							
Transportation regulation compliance	UN38.3							
GENERAL								
Dimensions (L x W x H) [mm]	368*310*140							
Net weight [kg]	5.2							
Expected life [years]	5							
NOMINAL CHARACTER (Battery Pack)	T-BAT S 5.8	T-BAT S 11.5	T-BAT S 17.3	T-BAT S 23.0	T-BAT P 5.8	T-BAT P 11.5	T-BAT P 17.3	T-BAT P 23.0
Nominal voltage [V]	115.2	230.4	345.6	460.8	115.2	230.4	345.6	460.8
Operating voltage [V]	100-131	200-262	300-393	400-524	100-131	200-262	300-393	400-524
Total energy [kWh]	5.8	11.5	17.3	23	11.5	23	34.6	46.1
Standard power [kW]	2.9	5.8	8.7	11.6	2.9	5.8	8.7	11.6
Max. power [kW]	4.0	8.0	12.0	16.0	4.0	8.0	12.0	16.0
Pollution degree	PD3							
Overvoltage category (OVC)	II							
Protective class	I							
Recommend charge/discharge current [A]	25							
Max. charge/discharge current [A]	35							
Cycle life [90% DOD]	6000 Cycles							

Note:BMS/Master Battery is no longer necessary

X1-Hybrid can be connected to 6 batteries at most. X3-Hybrid can be connected to 8 batteries at most.

SOLAX CLOUD MONITORING

Pocket WiFi V3.0

Feature

- Quick installation with "Plug & Play" function
- IP 65 dust prevention water proofing designs
- Stable data transmission and good reliability
- Offline data storage and resuming
- Multiple antenna adaptations according to the situation

Product Name	Pocket Wi-fi
Model	Pocket WiFi V3.0
Power Supply	5V 260mA DC
Wireless Module	Wi-Fi 2.4GHz
Antenna Gain	3dBi
Data Transfer Interval	5 mins
Dimensions	95.5*45.7*28.5 mm
Weight	50g
Degree of Protection	Ip65
Operating Temperature Range	-40°C ~ +85°C

Product Name	Pocket LAN
Model	Pocket LAN V3.0
Power Supply	5V 180mA DC
Ethernet	10/100M
Data Transfer Interval	5 mins
Dimensions	112*45.7*28.5 mm
Weight	75g
Degree of Protection	Ip65
Operating Temperature Range	-25°C ~ +75°C

Pocket Lan V3.0

Feature

- Quick installation with "Plug & Play" function
- IP 65 dust prevention water proofing designs
- Stable data transmission and good reliability
- Offline data storage and resuming

Pocket 4G V3.0

Feature

- Quick installation with "Plug & Play" function
- IP 65 dust prevention water proofing designs
- Stable data transmission and good reliability
- Offline data storage and resuming
- Multi-communication operator support

Product Name	Pocket Wi-Fi Plus
Model	Pocket 4G V3.0
Power Supply	5V 500mA DC
SIM Card Size	Nano - 4FF 12.3*8.8 mm
Support Band	LTE-FDD: B1/B3/B5/B7/B8/B20/B28 LTE-TDD: B38/B40/B41 GSM: 850/900/1800/1900MHz
Data Transfer Interval	5 mins
Dimensions	112*45.7*28.5 mm
Weight	135g
Degree of Protection	Ip65
Operating Temperature Range	-35°C ~ +75°C

METER & CT

DDSU666

- Single-phase meter
- 80 A

DTSU666

- Three-phase meter
- 80 A

DDSU666-CT

- Single-phase meter
- 200 A
- With CT

DTSU666-CT

- Three-phase meter
- 200 A
- With CT

SDM230-Modbus

- Single-phase meter
- 100 A

SDM630M-CT V2

- Three-phase meter
- 200 /600 /1500 A
- With CT

ADAPTER BOX

Max. output voltage[V]	277
Max. output current[A]	5
Rated input voltage[V]	12
Degree of protection	IP65
Operating ambient temperature range [°C]	-25~60