ULTRA-THIN DESIGN

A1-ESS-G2

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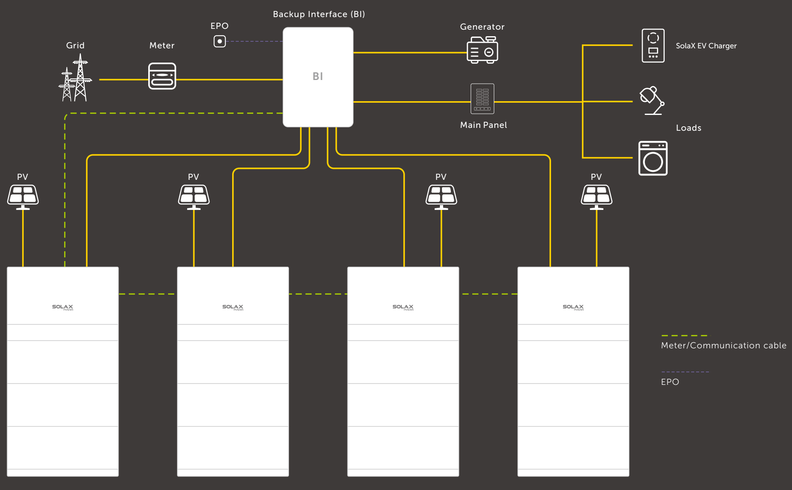
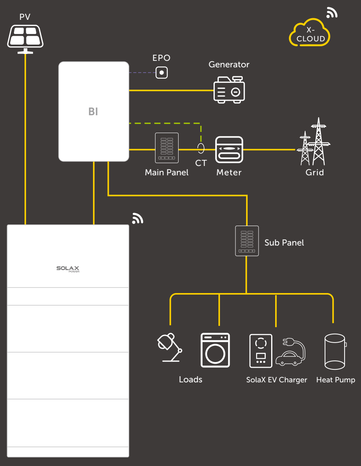
ENERGY STORAGE SYSTEM (PARALLEL OPERATION)

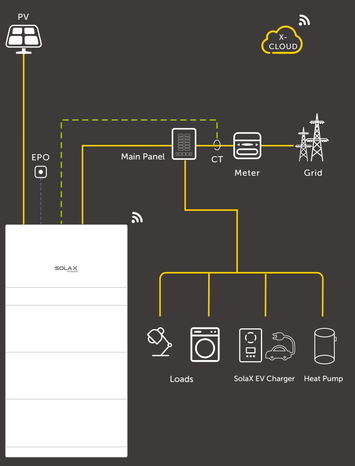
- Friendly with existing PV system
- Up to 4 systems in parallel, 7.6kW *4 =30.4kW, 20kWh*4=80kWh
- Up to 4 battery modules stackable, 20kWh each system
- 160A BI supported



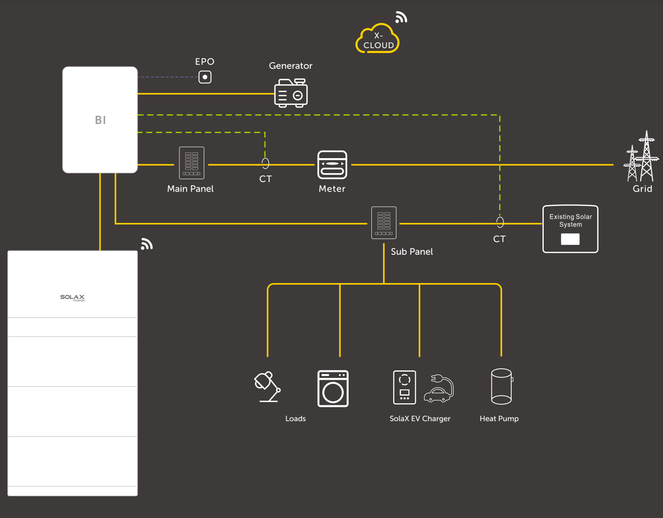
FLEXIBLE HOME BACKUP SOLUTION



FLEXIBLE HOME ON-GRID SOLUTION



FLEXIBLE HOME BACKUP SOLUTION AC COUPLED



A1-ESS-G2

A1-HYB-G2

- Up to 200% oversizing allowed
- Up to 3 MPPTs
- Maximum 16A PV input current
- Microgrid supported
- Optional revenue grade metering
- Up to 4 systems in parallel ①
- Peak efficiency: 98%
- Integrated arc fault protection and rapid shutdown transmitter

T-BAT-SYS-HV-5.0

- Long life & Safe LPF battery
- Up to 4 battery modules stackable, 20kWh each system
- Modular design & Quick installation
- Floor or wall mounted

A1-BI-200-G2

- Maximum 160A AC current
- Flexible home backup
- Up to 4 systems in parallel
- 64A generator supported
- Built-in energy management meter
- Smart load management ②
- Heat pump extendable ②
- EV charger extendable ②

A1-HYB-G2

	A1-HYB-3.8-G2	A1-HYB-5.0-G2	A1-HYB-6.0-G2	A1-HYB-7.6-G2
INPUT PV				
Maximum recommended PV power [W]	7600	10000	10000	15200
Maximum DC voltage [V]	550			
Nominal DC operating voltage [V]	360			
Maximum input current [A]	A: 16 / B: 16	A: 16 / B: 16	A: 16 / B: 16	A: 16 / B: 16 / C: 16
Maximum short circuit current [A]	A: 20 / B: 20	A: 20 / B: 20	A: 20 / B: 20	A: 20 / B: 20 / C: 20
MPPT voltage range [V]	90-500			
Start input voltage [V]	120			
No. of MPP trackers, Strings per MPP tracker	2, 1 / 1	2, 1 / 1	2, 1 / 1	3, 1 / 1 / 1
DC disconnection switch	YES			
INPUT/OUTPUT AC				
Nominal AC power [VA]	3816	5016	6000	7608
Maximum apparent AC power [VA]	3816	5016	6000	7608
Nominal AC voltage [V] / Nominal AC frequency [Hz]	240 / 60			
Nominal AC current [A]	15.9	20.9	25	31.7
Displacement power factor	0.8 leading to 0.8 lagging			
Total harmonic distortion (THD, rated power)	< 3%			
INPUT/OUTPUT BAT				
Battery type	Li-ion			
Maximum output power [W]	3816	5016	6000	7600
Maximum charge / discharge current [A]	54	54	54	54
Reverse-polarity protection	YES			
Cycle efficiency charging to discharging (PCS)	88.5%	90.5%	91.5%	92.5%
ADDITIONAL FEATURES				
AFCI	YES			
Revenue grade metering, ANSI C12.20	Optional			
Rapid shutdown transmitter	Integrated PLC controller to RSD			
EFFICIENCY				
CEC weighted efficiency	97.50%			
Maximum inverter efficiency	98.00%			
POWER CONSUMPTION				
Internal consumption (night) [W]	< 3			
STANDARD				
Safety	UL1741, UL1741 SA, UL16998, CSA - C22.2 No. 107.1-01, Canadian AFCI according to T.I.L. M-07			
Emissions	FCC Part 15 Class B			
Grid connection standards	IEEE1547, Rule 21, Rule14 (HI)			
INSTALLATION SPECIFICATIONS				
Protection class	NEMA 4X			
Operating temperature range [°F / °C]	-13 to +140 / -25 to +60			
De-rating start temperature [°F / °C]	113 / 45 or above			
Storage temperature range [°F / °C]	-13 to +167 / -25 to +75			
Relative humidity [%]	0 to 95			
Altitude [ft / m]	9843 / 3000 MAX			
Typical noise emission [dBA]	< 30			
Over voltage category	IV (electric supply side), II (PV side)			
GENERAL				
Dimensions (W x H x D) [in / mm]	33.1 x 15.7 x 5.7 / 840 x 400 x 145			
Weight [lb / Kg]	75 / 34			
Cooling	Natural convection			
Topology	Transformerless			
Communication interfaces	RS485, CAN, WIFI (optional) / 4G (optional), Dry Contact			
Warranty	10 years			

A1-AC-G2

	A1-AC-3.8K-G2	A1-AC-5.0K-G2	A1-AC-6.0K-G2	A1-AC-7.6K-G2
INPUT/OUTPUT AC				
Nominal AC power [VA]	3816	5016	6000	7608
Maximum apparent AC power [VA]	3816	5016	6000	7608
Nominal AC voltage [V] / Nominal AC frequency [Hz]	240 / 60			
Nominal AC current [A]	15.9	20.9	25	31.7
Displacement power factor	0.8 leading to 0.8 lagging			
Total harmonic distortion (THD, rated power)	< 3%			
INPUT/OUTPUT BAT				
Battery type	Li-ion			
Maximum output power [W]	3816	5016	6000	7600
Maximum charge / discharge current [A]	54	54	54	54
Reverse-polarity protection	YES			
Cycle efficiency charging to discharging (PCS)	88.5%	90.5%	91.5%	92.5%
ADDITIONAL FEATURES				
Revenue grade metering, ANSI C12.20	Optional			
Efficiency				
Maximum inverter efficiency	98.00%			
POWER CONSUMPTION				
Internal consumption (night) [W]	< 3			
STANDARD				
Safety	UL1741, UL1741 SA, CSA - C22.2 No. 107.1-01			
Emissions	FCC Part 15 Class B			
Grid connection standards	IEEE1547, Rule 21, Rule14 (HI)			
INSTALLATION SPECIFICATIONS				
Protection class	NEMA 4X			
Operating temperature range [°F / °C]	-13 to +140 / -25 to +60			
De-rating start temperature [°F / °C]	113 / 45 or above			
Storage temperature range [°F / °C]	-13 to +167 / -25 to +75			
Relative humidity [%]	0 to 95			
Altitude [ft / m]	9843 / 3000 MAX			
Typical noise emission [dBA]	< 30			
Over voltage category	IV (electric supply side)			
GENERAL				
Dimensions (WxHxD) [in / mm]	33.1 x 15.7 x 5.7 / 840 x 400 x 145			
Weight [lb / Kg]	75 / 34			
Cooling	Natural convection			
Topology	Transformerless			
Communication interfaces	RS485, CAN, WIFI (optional) / 4G (optional), Dry Contact			
Warranty	10 years			

T-BAT-SYS-HV-5.0

	T-BAT H 10.0	T-BAT H 15.0	T-BAT H 20.0
MODEL			
Battery type	100Ah Lithium (LFP)		
Component	TBMS-MC560060 + 2*TP-HS50	TBMS-MC560060 + 3*TP-HS50	TBMS-MC560060 + 4*TP-HS50
NOMINAL CHARACTER			
Voltage [V]	102.4	153.6	204.8
Operating voltage range [V]	90 - 116	135 - 174	180 - 232
Total energy [kWh]	10	15	20
Usable energy [kWh][4]	9	13.5	18
Battery roundtrip efficiency [%][5]	95%		
Maximum power [kW]	5.5	8.3	11.1
Maximum charge / discharge current [A]	54		
Cycle life (90% DOD)	6000 cycles		
Warranty	10 years (Details refer to SolaX Power warranty statement.)		
INSTALLATION SPECIFICATIONS			
Charge / Discharge temperature range [°F / °C]	Charge: 32 to 127.4 / 0 to 53, Discharge: 14 to 127.4 / -10 to 53		
Storage temperature range [°F / °C]	3 months: 4 to 122 / -20 to 50, 1 year: 32 to 104 / 0 to 40		
Relative humidity [%]	0 to 100		
Altitude [ft / m]	9843 / 3000 MAX		
Protection class	NEMA 4X		
STANDARD			
Certification	UN38.3, UL1973, UL9540, UL9540A		
Hazardous materials classification	Class 9		
GENERAL			
Cooling	Natural convection		
Dimensions (W x H x D) [in / mm] - TBMS-MC60060 (BMS)	33.5 x 5.2 x 5.8 / 850 x 133 x 148		
Dimensions (W x H x D) [in / mm] - TP-HS50 (BAT)	33.5 x 23.6 x 5.8 / 850 x 600 x 148	33.5 x 35.4 x 5.8 / 850 x 900 x 148	33.5 x 47.2 x 5.8 / 850 x 1200 x 148
Dimensions (W x H x D) [in / mm] - Base	33.5 x 2.2 x 5.8 / 850 x 55 x 148		
Weight [lb / kg]	TBMS-MC560060: 22 / 10 + 2*TP-HS50: 238 / 108	TBMS-MC560060: 22 / 10 + 3*TP-HS50: 357 / 162	TBMS-MC560060: 22 / 10 + 4* TP-HS50: 476 / 216

A1-BI-200-G2

GRID INPUT	
Nominal AC input voltage [V] / Nominal AC frequency [Hz]	120 / 240, 60
Maximum AC input current [A]	160
OUTPUT TO MAIN PANEL IN GRID TIED OPERATION	
Nominal AC output voltage [V]	120 / 240
Maximum AC input current [A]	160
OUTPUT TO MAIN PANEL IN BACKUP OPERATION	
Nominal AC output voltage [V]	120 / 240
Imbalance compensation in backup operation [VA]	5000
Split phase imbalance output current [A]	41.7
Maximum AC output current [A]	126.8
INPUT FROM INVERTER	
Maximum number of inverter inputs	4
Maximum AC power [W]	7600
Maximum continuous input current @240V [A]	31.7
Maximum inverter input AC circuit breaker [A]	40 (optional)
Upgradability	Up to 4 x 40A circuit breaker
GENERATOR	
Maximum AC power [W]	15000
Maximum continuous input current [A]	63
Auto generator start	Yes
GENERAL	
Dimensions (HxWxD) [in / mm]	27.8 x 17.7 x 5.9 / 706 x 450 x 15
Weight [lb / kg]	69.4 / 31.5
Energy meter accuracy	1%
Communication interfaces	RS485, CAN, Dry Contact
Cooling	Fan
Warranty	10 years
STANDARD	
Safety	UL1741, CSA 22.2 NO.107
Emissions	FCC part 15 Class B
INSTALLATION SPECIFICATIONS	
Altitude [ft / m]	9843 / 3000 MAX
Operating temperature range [°F / °C]	-13 to +140 / -25 to +60
Protection class	NEMA 3R
Typical noise emission [dBA]	< 50

① To be released in Q4 2022. ② To be released in Q2 2023. ③ To be released in Q3 2023.
④ Test Conditions: 90% DOD, 0.2C charge & discharge at + 25 °C. ⑤ Maximum Charge/Discharge power may be variant with different inverter models.

**V1.1 Information may be subject to change without notice.* 650.00024.00