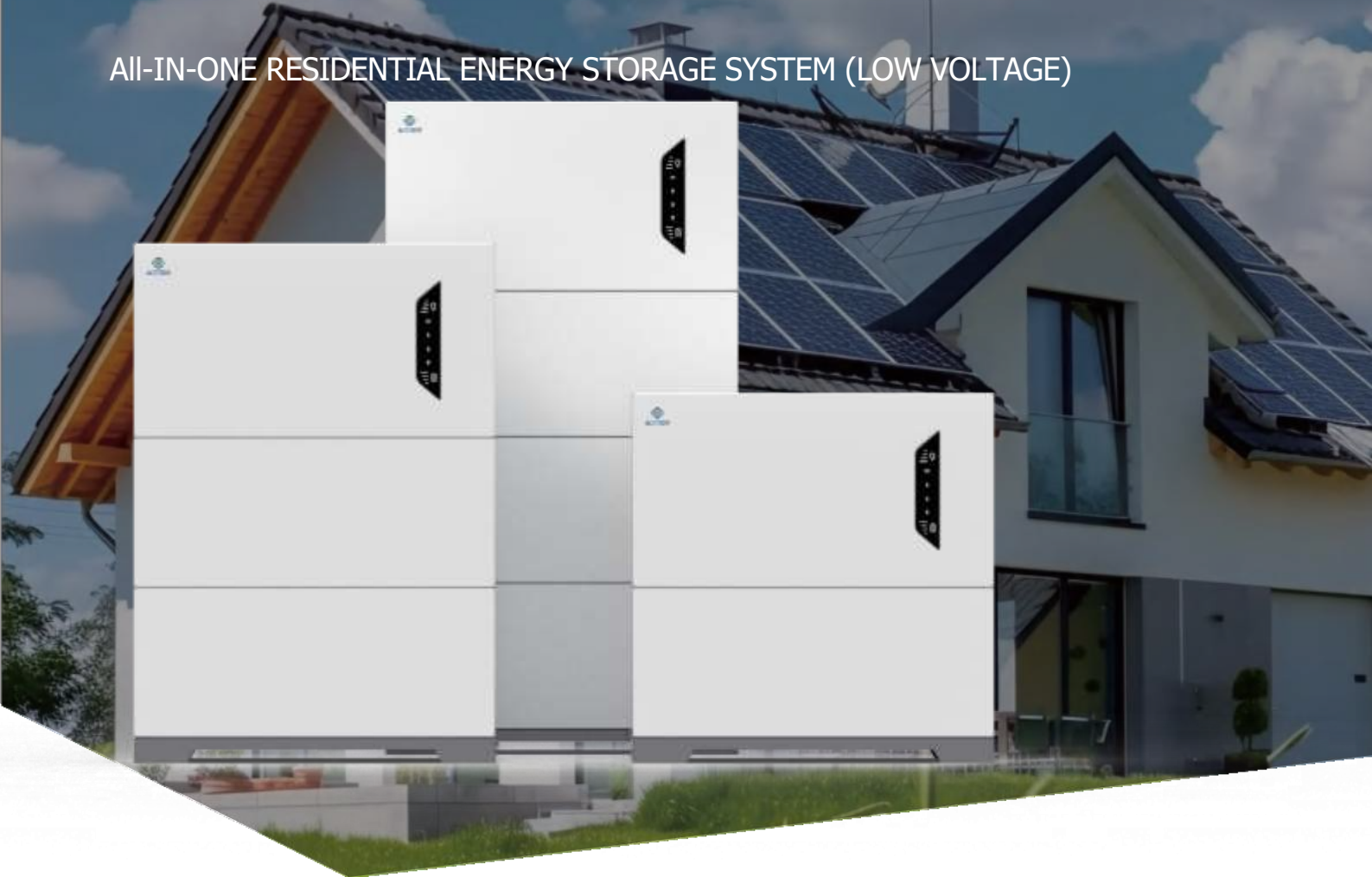


RESS PE20



ALL-IN-ONE RESIDENTIAL ENERGY STORAGE SYSTEM (LOW VOLTAGE)



Highly Integrated Design

Integrated design of PCS, BMS, and EMS (3S) to enhance system stability.



High Reliability

Compliance with the latest VDE-AR-E 2510-50 battery certification.

KEY FEATURES



Wide Environmental Compatibility

Support for temperatures as low as -25°C with an integrated heating function.



High usable energy

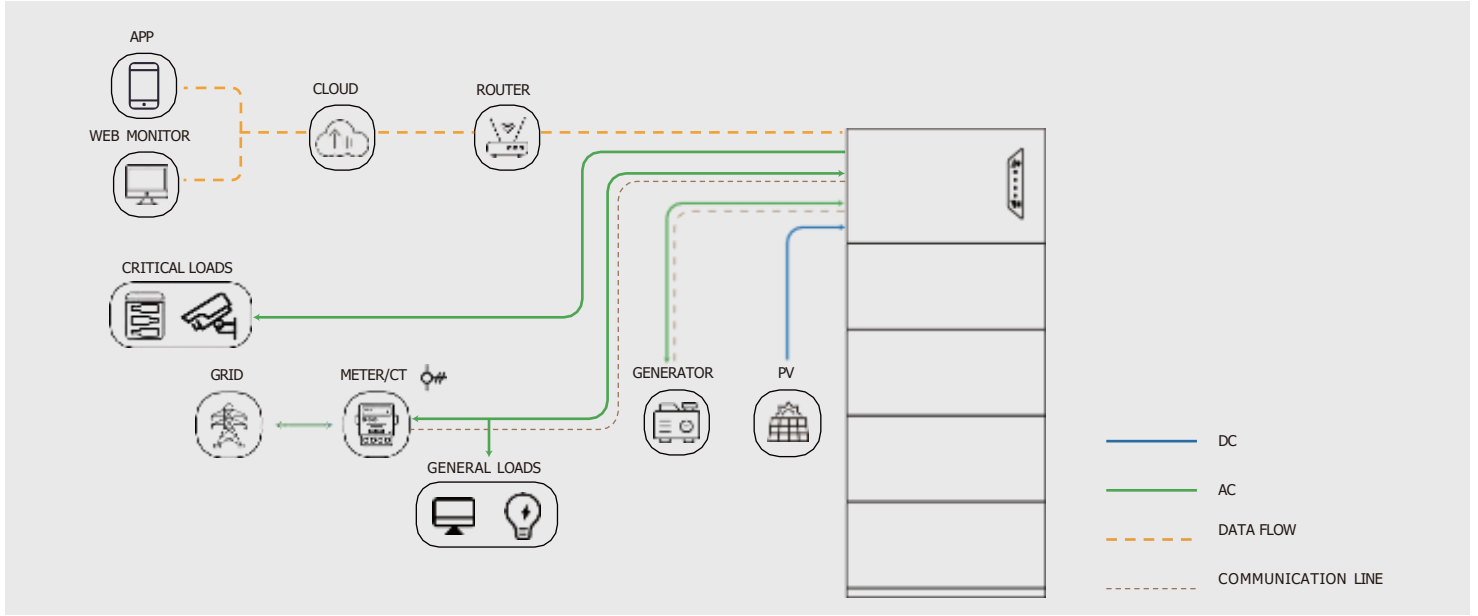
95% DOD.



Quick Installation

Quick insert design for both power module and battery module to save installation time and cost.

CONNECTION



TECHNICAL DATA



All-in-One RESS Model	RESS-1A-5.1-L2-3.68K RESS-1A-10.2-L2-3.68K RESS-1A-15.3-L2-3.68K RESS-1A-20.4-L2-3.68K	RESS-1A-5.1-L2-5K RESS-1A-10.2-L2-5K RESS-1A-15.3-L2-5K RESS-1A-20.4-L2-5K	RESS-1A-5.1-L2-6K RESS-1A-10.2-L2-6K RESS-1A-15.3-L2-6K RESS-1A-20.4-L2-6K
All-in-One PCS Model	RESS-1P-3.68K-L02	RESS-1P-5K-L02	RESS-1P-6K-L02
Grid AC Input and AC Output			
Rated Output Apparent Power	3680VA	5000VA[1]	6000VA
Rated Output Active Power	3680W	5000W[1]	6000W
MAX Output Apparent Power	3680VA	5000VA	6600VA
Rated Input Apparent Power	7368VA	9200VA	9200VA
Rated Output Current	16.0 A ac	21.7 A ac	26.1 A ac
Rated Input Current	16.0 A ac	21.7 A ac	26.1 A ac
MAX Output Current	16.7 A ac	22.7 A ac	27.3 A ac
MAX Input Current	32.0 A ac	40.0A ac	40.0A ac
Rated AC Voltage		220/230/240 ac,	
Output Voltage Range (V)		180~260 ac,	
AC Rated Frequency		50 Hz/60Hz	
Wiring		L+N+PE	
Power Factor (cosΦ)		0.8 leading – 0.8 lagging	
THDI		<3%	
Backup(EPS)			
MAX. Output Apparent Power	3680VA	5000VA	6000VA
MAX. Output Current	16.0 A ac	21.7 A ac	26.1 A ac
Rated Output Active power	3680W	5000W	6000W
Rated Output Voltage		230 Vac	
Rated Output Frequency		50/60Hz	
THDV(@Linear Load)		<3%	
Switch Time		10ms	

TECHNICAL DATA

All-in-one RESS Model	RESS-1A-5.1-L2-3.68K RESS-1A-10.2-L2-3.68K RESS-1A-15.3-L2-3.68K RESS-1A-20.4-L2-3.68K	RESS-1A-5.1-L2-5K RESS-1A-10.2-L2-5K RESS-1A-15.3-L2-5K RESS-1A-20.4-L2-5K	RESS-1A-5.1-L2-6K RESS-1A-10.2-L2-6K RESS-1A-15.3-L2-6K RESS-1A-20.4-L2-6K
All-in-one PCS Model	RESS-1P-3.68K-L02	RESS-1P-5K-L02	RESS-1P-6K-L02
PV String Input			
Recommended Max. PV Input Power	7200W	10000W	10000W
MAX.PV Input Voltage		500Vdc	
Startup Voltage		120Vdc	
Nominal Input Voltage (V)		360Vdc	
MPPT Voltage Range		120-480Vdc	
MPPT Voltage Range at Nominal Power (V)	200-425Vdc		250-425Vdc
Number of MPPTs		2	
Max. Number of PV Strings per MPPT		1	
Max. Input Current per MPPT		20A	
Max. Short-circuit Current per MPPT		25A	
Reverse Connect Protection		Yes	
Efficiency			
MPPT Efficiency	99.90%	99.90%	99.90%
Euro Efficiency	97.50%	97.50%	97.50%
MAX. Efficiency	98.00%	98.00%	98.00%
Battery			
Battery Type		Lithium-ion Battery	
System Energy		5.1kWh / 10.2kWh / 15.3kWh / 20.4kWh	
Usable Energy [2]		4.86kWh / 9.72kWh / 14.59kWh / 19.45kWh	
Battery Module Model		RESS-BM-051100-L0	
Rated Battery Voltage		51.2V	
Recommend Charging/Discharging Current		50A/module	
Number of Battery Modules	1 / 2 / 3 / 4	1 / 2 / 3 / 4	1 / 2 / 3 / 4
Max Charging/Discharging Current	80A / 80A / 80A / 80A	100A / 120A / 120A / 120A	100A / 125A / 125A / 125A
Max Chargingpower	3680W	5000W	6000W
Max Discharging Power	3900W	5400W	6400W
Cycle Life		>=6000 cycles [3]	
Battery Auto Wakeup		Yes	
Function			
CT/ Meter (Option)		Yes	
OTA		Yes	
Safety Protection			
PV String Reverse Polarity Protection		Yes	
DC Short Circuit Current Protection		Yes	
DC Over Current Protection		Yes	
DC Over Voltage Protection		Yes	
AC Output Short Circuit Current Protection		Yes	
AC Output Over Current Protection		Yes	
AC Over Voltage Protection		Yes	
Anti-island Protection		Yes	
Leakage Current Detection		Yes	
Ground Connection Detection		Yes	
AFCI		optional	
Rapid DC Voltage Cut Off		optional	
Overvoltage Category		AC III ; DC II	
General			
Dimensions (W*H*D) (mm)		725*(740/1040/1340/1640)*230	
Net Weight		75kg / 121kg / 167kg /213kg	
Installation		Floor-mounted	
Operating Temperature Range		Charge :0°C~50°C Discharge:-20°C~50°C	
Operating Temperature Range (With Integrated Heating Module)		Charge :-25°C~50°C Discharge:-25°C~50°C	
Max. Operating Altitude		< 4000m(> 2000m power Derating)	
Relative Humidity Range		0~95%(No Condensation)	
Ingress Protection Rating		IP66	
Climatic Category		4K4H	
Cooling		Natural convection	
Noise		<35dB	
Communication		RS485 / WLAN / Bluetooth / DRP / DRM / Meter, LAN / 4G(Optional)	
Display		LED indicators / APP/ Web	
Warranty		Inverter: 5 years (expand to 10 years); Battery:10 years	
Standard			
Safety		IEC/EN 62109-1&-2 IEC62619/CE/UN38.3	
EMC		IEC/EN 61000-6-1/-2 IEC/EN 61000-3-2/-12 IEC/EN 62920 IEC/EN 61000-6-3/-4 IEC/EN 61000-3-3/-11	
Grid		EN 50549-1:2019/AC:2019/RFG:2016; CEI 0-21:2022; Arret du 9 juin 2020 ; G98/G99/G100; UNE 217001/217001/NTS V2.1/RD 244; VDE-AR-N 4105:2018-11(VDE V 0124-100:2020-06);	

[1]4600VA/4600W for VDE-AR-N4105 & NRS 097-2-1.

[2]Test Conditions - Temperature 25°C, at the beginning of life, cell charge voltage between 2.8~3.5V, 0.5C.

[3]25°C ambient temperature, recommended charging/discharging current.



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