



SOLAREGE SINGLE-PHASE RESIDENTIAL HYBRID INVERTER

SE5000-AUS20NNB2 & SE6000-AUS20NNB2

SolarEdge's single-phase StoreEdge™ inverter is an all-in-one solution that uses a single on-grid DC optimised inverter to manage and monitor both solar generation and energy storage.

Homeowners are automatically provided with backup power in the event of grid interruption to power to pre-selected loads.

Solar energy can be stored in a battery for on-grid applications such as meeting export limitations, offering demand response, peak shaving and performing time of use shifting for reduced electricity bills.

Safety is enhanced during installation, maintenance and emergencies, while the online SolarEdge Portal monitors the performance of each individual panel.

solaredge



REDUCE ELECTRICITY BILLS WITH MAXIMISED SELF CONSUMPTION

HOW YOU BENEFIT



HIGH EFFICIENCY

Includes hardware required for the automatic supply of power to backed-up loads in the event of grid outages.



HYBRID INVERTER

Unique ability to perform the function of a PV Inverter and a Battery Inverter in a single unit.



ENHANCED SAFETY

Includes integrated rapid shutdown functionality and designed to eliminate high voltage during installation, maintenance or firefighting.



INNOVATIVE

Built-in monitoring of battery status, PV production, remaining backup power, and self-consumption data.



SOLAHART WARRANTY

Enjoy a 12-year warranty, for peace of mind.*

Technical Data

MODELS	SE5000-AUS20NNB2	SE6000-AUS20NNB2	SE5000-AUS20NNB2	SE6000-AUS20NNB2
Output AC	Loads/Grid		Backup Power ⁽¹⁾	
Rated AC power output	4985 VA	6000 VA	Lower of 4985 VA, battery max power	
Maximum AC power output	4985 VA	6000 VA	Lower of 6600 VA, battery max power	
AC output voltage (nominal), L - N ⁽²⁾	220 / 230 Vac			
AC output voltage range, L - N	184 - 264.5 Vac			
AC frequency	50 / 60 ± 5 Hz			
Maximum continuous output current	27 A		22 A	
AC Breaker	N/A		Yes	
Residual current detector / Residual current step detector	300 / 30 mA		N/A	
Utility monitoring, island protection, country configurable thresholds	Yes		N/A	
Charge battery from AC (if allowed)	Yes		N/A	
Total harmonic distortion (THD)	<3 %		<5 %	
Power factor with rated power	>0.99 (configurable; 0.8 leading to 0.8 lagging)		0.2 leading to 0.2 lagging	
Automatic switch-over time	N/A		<2 sec	
Typical night time power consumption			<5 W	

Input DC (Battery)	SE5000-AUS20NNB2	SE6000-AUS20NNB2
Number of batteries per inverter	1 or 2 ⁽³⁾	
Peak power	7000 W	
Compatible batteries	LG Chem RESU10-SEG	
Continuous power	5000 Vdc	
Max input voltage	1000 Vdc	
Max input current	17.5 Adc	
DC fuses on plus and minus	25 A (field replaceable)	
Input DC (PV)		
Max DC power (STC)	6750 W	8100 W
Additional DC power for DC coupled StorEdge systems	kWp equivalent of battery continuous power, and no more than 5 kWp	
Max input current	19.5 Adc	23 Adc
2-pole disconnection	Yes	
Input DC (PV and Battery)		
Transformer-less, ungrounded	Yes	
Maximum input voltage	500 Vdc	
Nom DC input voltage	400 Vdc	
Reverse-polarity protection	Yes	
Earth-fault isolation detection	600 kΩ Sensitivity	
Maximum inverter efficiency	97.6 %	
European weighted efficiency	97.4 %	

Installation Specifications	SE5000-AUS20NNB2	SE6000-AUS20NNB2
AC output conduit size / wire cross section	Loads/Grid: 32 mm / 4-14 mm ² Backup: 25-32 mm knockout / 4-14 mm ²	
DC output conduit size / wire cross section	PV & Battery: 25 mm / 4-6 mm ²	
Dimensions with connection unit (H x W x D)	962 x 315 x 184 mm	
Weight with connection unit	26.5 kg	
Cooling	Natural convection fan	
Noise	< 50 dBA	
Min - max operating temperature	-20 to +60°C (power derating from 50°C)	
Protection rating	IP65 - Outdoor and indoor	

Standard Compliance	
Safety	IEC-62103 (EN50178), IEC-62109
Grid connection standards ⁽⁴⁾	VDE 0126-1-1, NRS 097-2-1, AS4777
Emissions	IEC61000-6-2, IEC61000-6-3, IEC61000-3-11, IEC6100-3-12
Solahart Warranty	12 years*

⁽¹⁾ Not designed for standalone applications and requires AC for commissioning.

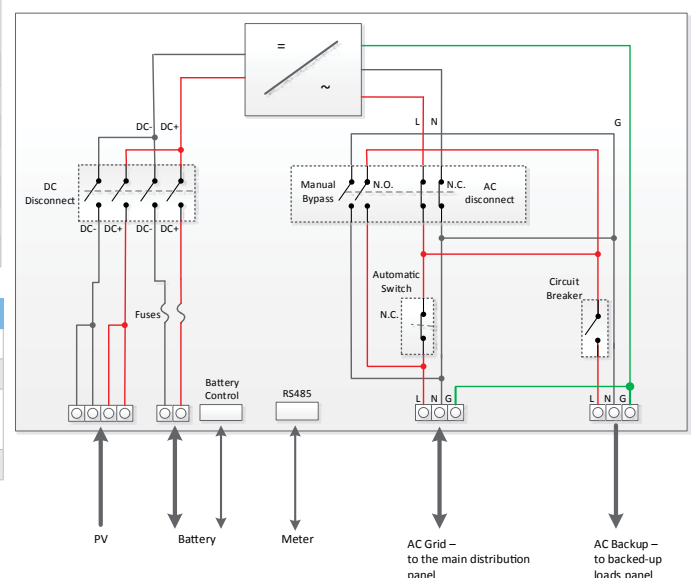
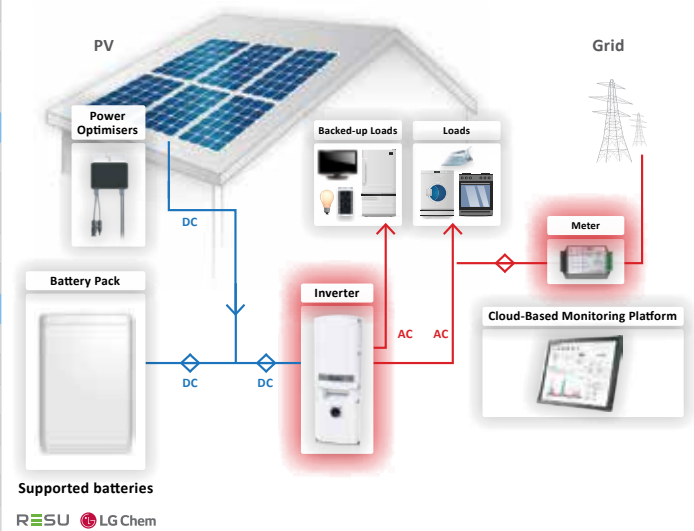
⁽²⁾ The StoreEdge Inverter must be connected Line to Neutral (and not Line to Line).

⁽³⁾ When connecting two LG Chem batteries, each battery must have a different part number; supporting SolarEdge firmware required.

⁽⁴⁾ For all standards refer to Certifications category in Downloads page: <http://solahart.com/groups/support/downloads>.

* For full details see Solahart Owner's Guide & Installation Instructions. 5 year warranty applies to RS485 Expansion Kit, SolarEdge Meter and Wireless Communication products excluding GSM Cellular Modem.

StorEdge Solution with Backup Power



Specifications and designs included in this data sheet are subject to change without notice.

Solahart Australia 1300 769 475 | www.solahart.com.au

Reorder code: SHDS/PVINVSE5&8_AUS2

IH0113_SE5000-AUS20NNB2 & SE6000-AUS20NNB2_June 2019