



ENGINEERED RENEWABLE SOLUTIONS

RESIDENTIAL SOLAR AND BATTERY BACKUP SOLUTIONS

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SOLAR SOLUTIONS

The table below contains a summary of our most popular residential solar PV systems our mechanical engineers have designed for our customers in the past. Please note these systems can be tailored to each client's budget, needs and requirements. If you would like a tailored design, please send through the following details to info@suburbanpower.co.za.

- Main supply breaker size.
- Three-phase or single-phase supply.
- Monthly energy usage.
- Physical address.

SOLUTION	OPTION 1	OPTION 2	OPTION 3
INVERTER *	5kW Deye Hybrid Inverter	8kW Deye Hybrid Inverter	16kW Deye Hybrid Inverter
BATTERY *	5kWh Battery	10kWh Battery	20kWh Battery
SOLAR *	10 Solar Panels (10x460W = 4.6kWp)	18 Solar Panels (18x460W = 8.28kWp)	27 Solar Panels (27x460W = 12.42kWp)
PAYBACK PERIOD *	7 years	7 years	8 years
MONTHLY SAVINGS *	R1 100	R1 950	R2 900
SOLAR ELECTRICITY COST	R2.40/kWh <small>eThekweni Residential Tariff = R2.58/kWh</small>	R2.21/kWh <small>eThekweni Residential Tariff = R2.58/kWh</small>	R2.28/kWh <small>eThekweni Residential Tariff = R2.58/kWh</small>
INCLUDED *	<ul style="list-style-type: none"> • Installation • Materials • Commissioning • Monitoring & Control 	<ul style="list-style-type: none"> • Installation • Materials • Commissioning • Monitoring & Control 	<ul style="list-style-type: none"> • Installation • Materials • Commissioning • Monitoring & Control
NOT INCLUDED	<ul style="list-style-type: none"> • SSEG Registration * • PrEng Sign-off • Maintenance SLA 	<ul style="list-style-type: none"> • SSEG Registration • PrEng Sign-off • Maintenance SLA 	<ul style="list-style-type: none"> • SSEG Registration • PrEng Sign-off • Maintenance SLA
INSTALLED COST	R119 500 <small>(R137 425 inclVAT)</small>	R199 850 <small>(R229 828 inclVAT)</small>	R304 850 <small>(R350 578 inclVAT)</small>

- ❖ Single-phase systems. Please get in touch if you have a three-phase supply.
- ❖ Minimum specified battery bank size for each option.
- ❖ The amount of solar can / will be adjusted according to the client's needs. Solar panels can also be added in the future.
- ❖ Estimated payback period, **excluding** all tax incentives.
- ❖ Based on an overall efficiency of 80% and 5 sun-hours a day. All savings and LCOEs (10 year) are exVAT and are estimated monthly savings averaged over the first year.
- ❖ The installation and materials costs are all averaged estimates and will need to be confirmed upon a final site visit.
- ❖ It is a requirement of most Municipalities that you register your small-scale embedded generator (SSEG) with your local authority.

BATTERY BACKUP SOLUTIONS

The table below contains a summary of our most popular residential battery backup solutions our mechanical engineers have designed for our customers in the past. Often clients tackle these projects in a staged approach, by adding solar panels in the next stage of their installation. It is essential that the system is designed correctly to allow for the integration to be as seamless as possible.

Please note these systems can also be tailored to each client's requirements and budget.

SOLUTION	OPTION 1	OPTION 2	OPTION 3
INVERTER *	2.4kW Synapse Inverter	5kW Deye Hybrid Inverter	8kW Deye Hybrid Inverter
BATTERY *	2.4kWh Battery	5kWh Battery	10kWh Battery
SYSTEM CAPABILITIES * (WHAT YOU CAN RUN DURING LOADSHEDDING)	<ul style="list-style-type: none"> • TV + wifi • Computers • Lights • Fan • etc 	<ul style="list-style-type: none"> • TV + wifi + computer • Lights + fan • Kitchen appliances • Hair dryers • Air conditioners * • Small pumps & motors • etc 	<ul style="list-style-type: none"> • TV + wifi + computer • Lights + fan • Kitchen appliances • Hair dryers • Air conditioners • Pumps & motors • etc
SOLAR READY	NO	YES	YES
INCLUDED *	<ul style="list-style-type: none"> • Installation • Materials • Commissioning • Monitoring & Control 	<ul style="list-style-type: none"> • Installation • Materials • Commissioning • Monitoring & Control 	<ul style="list-style-type: none"> • Installation • Materials • Commissioning • Monitoring & Control
NOT INCLUDED	<ul style="list-style-type: none"> • Maintenance SLA 	<ul style="list-style-type: none"> • Maintenance SLA 	<ul style="list-style-type: none"> • Maintenance SLA
INSTALLED COST	R39 850 (R45 828 incIVAT)	R73 500 (R84 525 incIVAT)	R112 500 (R129 375 incIVAT)

- ❖ Single-phase systems. Please get in touch if you have a three-phase supply.
- ❖ Minimum specified battery bank size for each option.
- ❖ The length you can run these appliances for all depends on the battery bank size.
- ❖ If the air conditioner is of "inverter type", there shouldn't be any issues.
- ❖ The installation and materials costs are all averaged estimates and will need to be confirmed upon a final site visit.

GENERAL COMPONENTS

