

# Elon® 100 kit easy selection guide: element matching

Solar PV array size (kW <sub>p</sub> )	Best matching geyser element size (kW)	2 <sup>nd</sup> choice geyser element size (kW)	Geyser size – bigger is better (litres)
<b>1 – 1.6</b>	<b>4</b>	3	100 - 200
<b>1.6 - 2</b>	<b>3</b>	4 or 2	100 - 200
<b>2 – 3</b>	<b>3</b>	4	150 – 300
<b>2 – 4</b> (two parallel PV strings)	<b>4</b>	NA	150 – 300

Short-Circuit Current @ STC  $I_{sc} < 20A$

Open-Circuit Voltage @ STC  $V_{oc} < 250V$

# Elon® 100 kit easy selection guide: how much hot water?



Solar PV array size (kW <sub>p</sub> )	Showers per day*	50%+ of daily hot water use provided for how many people?	How many people off-grid for hot water?	Typical number of solar PV modules
1 – 1.6				2 -3 modules
1.6 – 2				3 - 4 modules
2 - 3				4 - 5 modules
3 – 4 (two parallel PV strings)				6 - 8 modules

\* 6-minute showers at 40 °C with 8 litre/min (low-flow) showerheads

# Typical kit contents

Solar PV modules	Modules detail	Common components
2	1 string of 2 modules	<ul style="list-style-type: none"><li>• Elon 100 with controller, controller wire, element adapter and thermostat bridging wire</li><li>• Mounting kit (corrugated/IBR or tile)</li><li>• Solar cabling (4 mm<sup>2</sup> or larger)</li><li>• Earth cabling (6 mm<sup>2</sup> bare copper)</li><li>• MC4 connectors</li><li>• 4-way distribution board (DB)</li><li>• 2-pole DC circuit breaker (16A or 20A for one solar PV string; 32A for two strings) OR DC isolator + fuse</li><li>• Non-insulated ring lugs x 3</li></ul> <p>* For high lightning strike density areas (such as parts of Gauteng and Mpumalanga), a <b>Surge Protection Device (SPD)</b> is <b>recommended</b>: 220V DC Surge Protection Device (SPD), Type 2. Refer to Appendix F in the Installation Manual for more details.</p>
3	1 string of 3 modules	
4	1 string of 4 modules	
5	1 string of 5 modules	
6	2 strings of 3 modules (6 modules)	
8	2 strings of 4 modules (8 modules)	