
















Elon[®] kit easy selection guide: element matching

Solar PV array size (kW _p)	Matching geyser element size (kW)	Geyser (water tank) size (litres)
1 – 1.2	4 or 3	100 - 200
1.2 – 1.6	3 or 2	100 - 200
1.5 – 2	2	150 – 300
2.4 – 3.2 (two parallel PV strings)	4	150 – 300
3 – 4 (two parallel PV strings)	4	200+

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

Open-Circuit Voltage @ STC $V_{oc} < 240V$

Elon[®] kit easy selection guide: how much hot water?

Solar PV array size (kW _p)	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 – 1.2				2 - 3 modules
1.2 – 1.6				3 - 4 modules
1.5 – 2				4 - 5 modules
2.4 – 3.2 (two parallel PV strings)				6 - 8 modules
3 – 4 (two parallel PV strings)				8 - 10 modules

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

Typical kit contents

Solar PV modules	Modules detail	Element & thermostat	Common components
3	1 string of 3 modules	4 or 3 kW element & VKF-11 or TSE or Thermowatt thermostat	<ul style="list-style-type: none"> • Elon® 100 with controller, controller wire, element adapter and thermostat bridging wire • Mounting kit (corrugated/IBR or tile) • Solar cabling (4 mm² or larger) • Earth cabling (6 mm² bare copper) • MC4 connectors • 4-way distribution board (DB) • 2-pole DC circuit breaker (16A for one solar PV string; 32A for two strings) OR DC isolator + fuse • Non-insulated ring lugs x 3 <p>* For high lightning strike density areas (such as parts of Gauteng and Mpumalanga), a Surge Protection Device (SPD) is required: 220V DC Surge Protection Device (SPD), Type 2. Refer to Appendix F in the Installation Manual for more details.</p>
4	1 string of 4 modules	3 or 2 kW element & VKF-11 or TSE or Thermowatt thermostat	
5	1 string of 5 modules	2 kW element & VKF-11 or TSE or Thermowatt thermostat	
8	2 strings of 4 modules (8 modules)	4 kW element & VKF-11 or TSE or Thermowatt thermostat	
10	2 strings of 5 modules (10 modules)	4 kW element & VKF-11 or TSE or Thermowatt thermostat	