
















Elon® kit easy selection guide: element matching

| Solar PV array size (kW _p) | Best matching geyser element size (kW) | 2 nd choice geyser element size (kW) | Geyser size – bigger is better (litres) |
|---|--|---|--|
| 1 – 1.2 | 4 | 3 | 100 - 200 |
| 1.2 – 1.6 | 3 | 2 | 100 - 200 |
| 1.6 – 2 | 2 | 3 | 150 – 300 |
| 2 – 4 (two parallel PV strings) | 4 | NA | 150 – 300 |

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 |
|------------------|-------------------------------------|--|--|
| 2 | 1 string of 2 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> |
| 3 | 1 string of 3 modules | 4 or 3 kW element & VKF-11 or TSE or Thermowatt thermostat | |
| 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 | |
| 6 | 2 strings of 3 modules (6 modules) | 4 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 | |