

GF 100 TF

GF100 TF solar module are suitable for all Grundfos Renewable-energy based water pumping system.

GF100 TF is a high performance and high quality thin-film solar module. The module is of a framed design and with an integrated junction box.

The solar module must be mounted on a support structure with a tilted angle to ensure optimum exposure to sun irradiation.

Quality

- Manufactured in ISO 9001, ISO 14001-certified factory.
- Listed by Underwriter's laboratories (UL1730) for electrical and fire safety (Class C fire rating).
- Tested in accordance with IEC 61 646 and 61 730.
- Compliant with the requirements of IEC 61 646 including:
 - thermal cycling between -40°F and $+185^{\circ}\text{F}$ (-40°C and $+85^{\circ}\text{C}$) at 85% relative humidity,
 - simulated impact of one inch hail at 52 mph (terminal velocity),
 - a "damp heat" test, consisting of 1000 hours of exposure to 185°F (85°C) and 85% relative humidity,
 - a "hot spot" test determining a module's ability to tolerate localised shadowing (which can cause reverse-biased operation and localised heating),
 - static mechanical load, front and back, of 2400 Pa (0.35 psi/50 psf) corresponding to a windspeed of 81 mph (130 km/h); front load (e.g. snow) of 5400 Pa (0.78 psi/113 psf).

Warranties

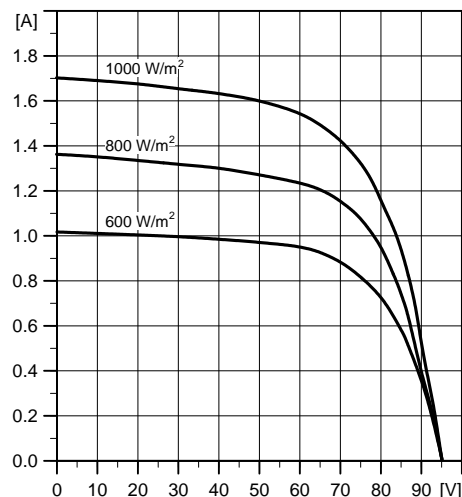
- Power output:
 - 25 years limited warranty of 80 % power output.
 - 10 years limited warranty of 90 % power output.
- Workmanship: 5 years.



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Performance

The performance chart below shows the relationship between the current [A] and the voltage [V].

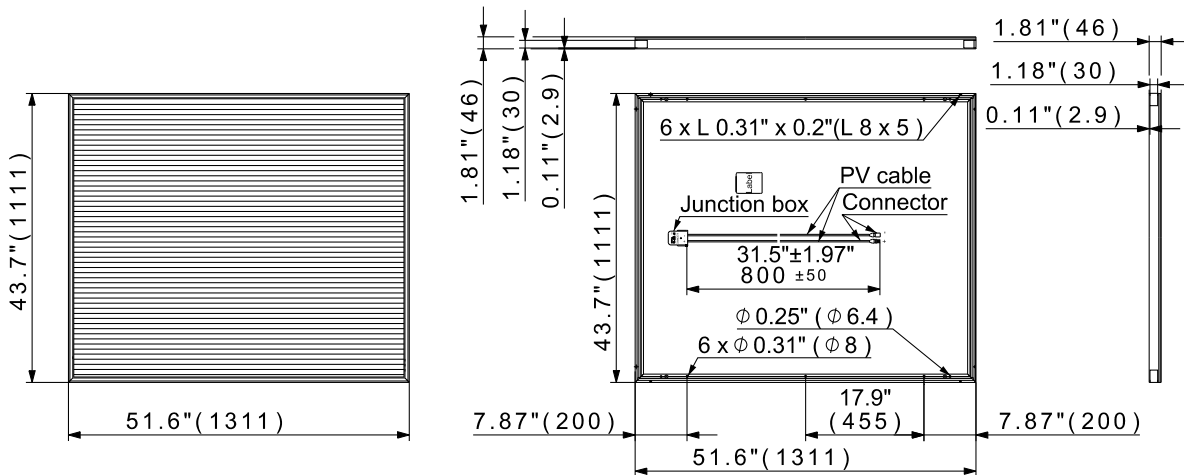


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Characteristics

| Data | GF 100 TF |
|---|--|
| Peak power ($P_{max.}$) | 100 [W] |
| Voltage (V_{mp}) | 70 [V] |
| Current (I_{mp}) | 1.43 [A] |
| Open circuit voltage (V_{oc}) | 96 [V] |
| Short circuit current (I_{sc}) | 1.7 [A] |
| Reference cell temperature (T_{ref}) | 77 °F / 25 °C |
| Solar irradiation at reference cell temperature (I_{ref}) | 1000 [W/m ²] |
| Net weight (15 modules) | 655 [lbs]/297 [kg] |
| Gross weight (15 modules) | 748 [lbs]/339 [kg] |
| Shipping volume (15 modules) | 42.48 [ft ³]/1.203 [m ³] |

Construction and dimensions



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The following combinations are available:

Standard:

- Solar module GF 100 TF
- Array-to-controller wire kit
- Array-to-array wire kit.

Option 1: For protection of array-to-controller wire

- Solar module GF 100 TF
- Array-to-controller wire kit
- Array-to-array wire kit
- Conduit for array-to-controller wire.

Option 2: Full protection of all wires

- Solar module GF 100 TF
- Array-to-controller wire kit
- Conduit for array-to-controller wire
- Cable guard
- Array-to-array wire kit inclusive conduit.

Product and accessories

| Product | Product no. |
|---|-------------|
| Solar module GF 100 TF (2 modules per box) | 97790619 |
| Array-to-controller wire kit ¹ | 91126024 |
| Array-to-array wire kit | 91126023 |
| Conduit for array-to-controller wire ² | 96521496 |
| Cable guard | 96537654 |
| Array-to- array wire kit inclusive conduit ³ | 96537655 |

¹ length 32.8 ft/10 m

² length 71 in/1800 mm

³ length 50 in/1275 mm

Support structures are available on request.

| | |
|---------------------|----|
| 97904911 0711 | GB |
| Repl. 97904911 0311 | |

ECM: 1078726

Subject to alterations.

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