

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

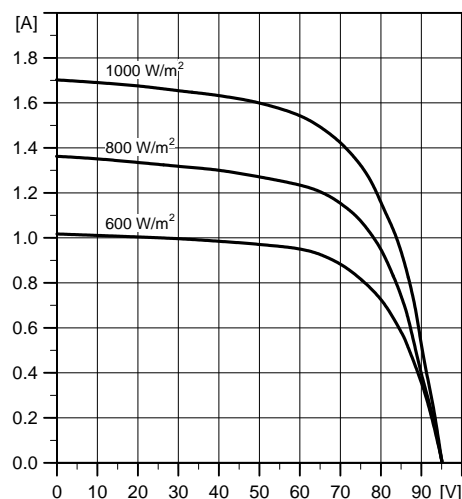
- Power output:
 - 25 years limited warranty of 80 % power output.
 - 10 years limited warranty of 90 % power output.
- Workmanship: 5 years.



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Performance

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

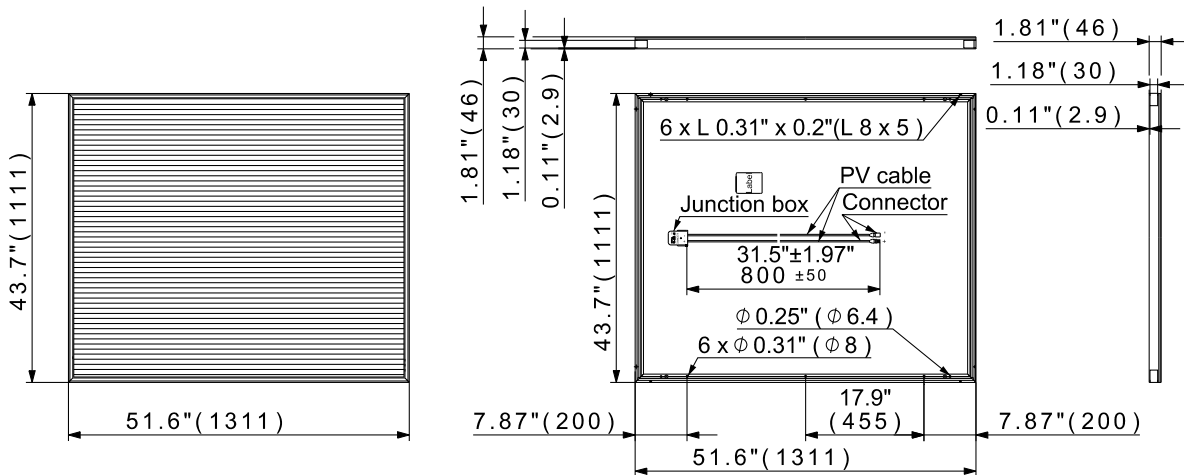


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Characteristics

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.