

The DELTA BST series are photovoltaic modules made of premium materials. At a low solar irradiance intensity, DELTA BST generate more electricity than standard solar modules with similar characteristics. During the manufacture of DELTA BST modules, a multi-stage quality control of components and processes is performed, including the IV test and a two-stage EL test before and after lamination. DELTA BST stand for high performance, durability and advanced technologies.



**Cells**

Technology .....	Mono crystal
Cell thickness.....	220 μm
Number of cells.....	72 (6x12)
Cell size.....	156 x 156
Quality class.....	Grade A

**Temperature coefficients**

NOCT*.....	45±2°C
Of power ( $P_{max}$ ).....	-0,44 %/°C
Of voltage ( $U_{oc}$ ).....	-0,34 %/°C
Of current ( $I_{sc}$ ).....	0,06 %/°C
Operating and storage temperature.....	-40 ÷ 85°C

\*NOCT - normal operating temperature of solar module

**Electrical parameters (STC)\***

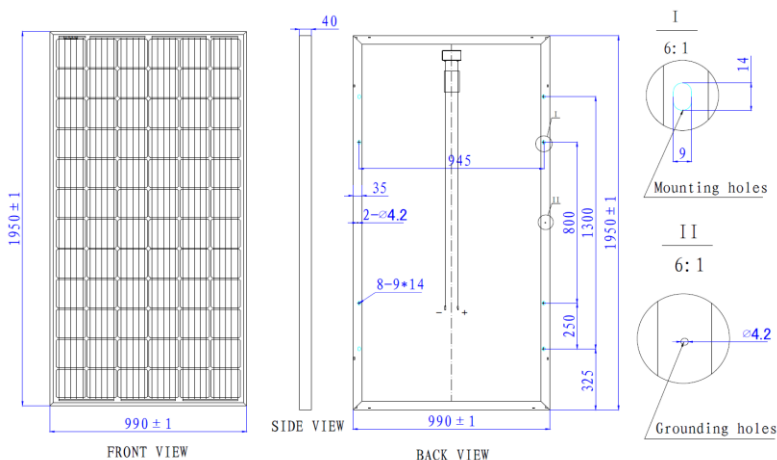
Peak electrical power ( $P_{max}$ ).....	320 W
Tolerance.....	+3 %
Nominal voltage ( $U_{nom}$ ).....	24 V
Voltage at maximum power point ( $U_{mp}$ ).....	37,7 V
Current at maximum power point ( $I_{mp}$ ).....	8,48 A
Short-circuit current ( $I_{sc}$ ).....	9,04 A
Open-circuit voltage ( $U_{oc}$ ).....	44,9 V
Maximum system voltage.....	1000 V
Maximum series fuse rating.....	15 A
Cell efficiency.....	18,83 %
Module efficiency.....	16,58 %

**Mechanical characteristics**

Module dimensions.....	1950 x 990 x 40 mm
Weight.....	23 kg
Front glass.....	Tempered non-reflecting glass 3.2 mm
Frame.....	Anodized aluminum
Terminal box.....	IP 67
Connectors.....	MC4
Cable length.....	900 mm
Output cable.....	4 mm <sup>2</sup>
Number of diodes.....	3
Wind load.....	5400 Pa

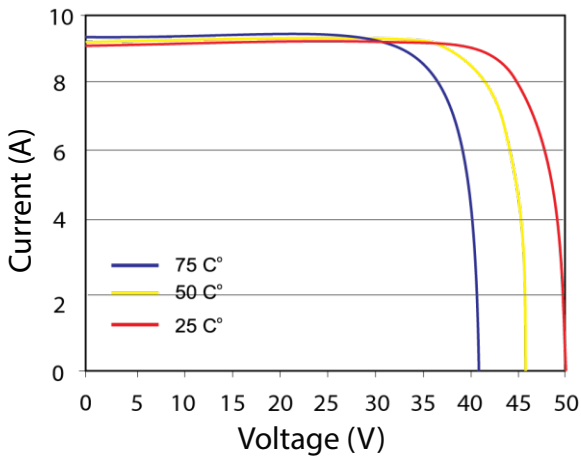
\*Standard measurement conditions (STC): light density 1000 W/m<sup>2</sup>, air mass AM = 1.5, nominal temperature 25°C

**Solar module arrangement**

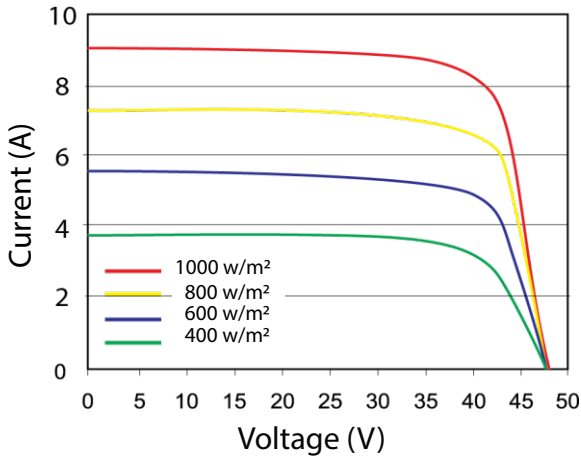


**ATTENTION!** The solar module should be installed and connected by a qualified technician with the corresponding access level. While connecting the solar module, strictly observe the connection polarity. Be sure to use a solar charge controller to charge the battery and power the load. Before using the module, read the manual carefully.

Power voltage current curve  
at different temperature



I-V curves at sun of 320-24 M  
at different irradiance



### Advantages of DELTA BST series modules



**High production standards**

The quality control of BST modules complies with international standards IEC61215 and IEC61730, and also includes an extended procedure containing 74 quality control points. Particular attention is given to the quality of raw materials.



**Higher electric-power generation**

The preset power reserve is guaranteed to be higher than the nominal up to +3%. High power generation rates during shading or cloudy weather.



**High efficiency**

Cell efficiency 18,83 %  
Module efficiency 16,58 %



**Resistance to loads**

The module can withstand high wind loads (up to 2400 Pa) and snow loads (up to 5400 Pa).



**International management system**

The products are manufactured and certified in accordance with ISO9001 standard.



**Fire and chemical resistance**

High resistance to salt and ammonia. Made of non combustible materials.



**Reliability**

Not subject to the effect of PID (potential induced degradation)

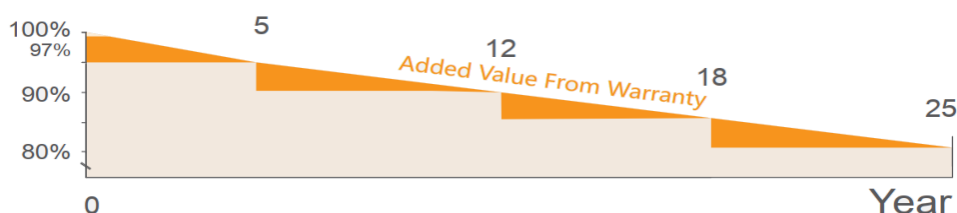
### Warranty

- The warranty for the solar module is 12 years and does not cover any damages caused by mechanical, thermal or other external influences.
- DELTA Solar guarantees that more than 90% of the declared nominal power will be retained for 12 years. 80% on the declared nominal power will be retained for 25 years.

Forecasted power conservation of the solar module

### LINEAR PERFORMANCE WARRANTY

- 12 Years Manufacturing Warranty
- 12 Years 90% Power Output
- 25 Years 80% Power Output



Our products are constantly being improved, so we reserve the right to make changes without prior notice.

