

# solarnova\*



## SOL\_GT BLACK

Module with monocrystalline cells, black frame and black backsheet

Since 1996, we have been developing and manufacturing high-grade photovoltaic modules for building integration and conventional uses. The roots of the company go very far back: The company founders came from AEG-Solartechnik, which had already constructed one of the first PV production lines by the 1980s.

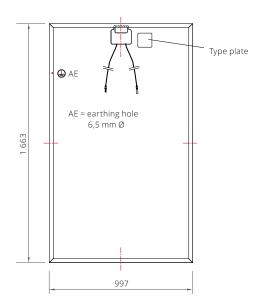
Our decades of experience allow us to achieve high standards in our work and ensure the reliability, performance and a consistent high quality for each individual module.

As a result, our customers reap the benefits, in particular from higher expected yields.

- \* Front glass with special anti-reflection coating
- \* Only positive performance tolerances
- High-grade materials and strict quality controls

#### TYPES AND ELECTRICAL DATA 1

Name	Isc (A)	Impp (A)	$Uoc\left(\vee\right)$	$\text{Umpp}\left(\vee\right)$	Pmpp (W)	Tolerance (W)
SOL 278 GT BLACK	9,44	8,82	39,40	31,50	278	0/+5,99
SOL 284 GT BLACK	9,48	8,89	39,80	32,00	284	0/+5,99
SOL 290 GT BLACK	9,55	8,93	40,20	32,50	290	0/+5,99



#### **DIMENSIONS AND WEIGHT**

Width x height<sup>2</sup>: 997 mm x 1663 mm

Thickness

including frame<sup>3</sup>: 39 mm

Weight: approx. 19 kg

#### **STRUCTURE**

Front: 3,2 mm toughened

white glass

with anti-reflection coating

Back: black backsheet
Cell size: 156 mm x 156 mm
Layout: 60 almost-square

monocrystalline solar cells

Frame: Aluminum, black anodized

Bypass diodes: 3 pcs. (in junction box)

#### **TEMPERATURE COEFFICIENTS**

Output: -0,410 %/K
Open circuit voltage: -0,320 %/K
Short-circuit current: +0,050 %/K

#### CONNECTION

Junction box: IP65 with integrated

bypass diodes

Cable: 4 mm² cross section

approx. 1 m in length

incl. plug

Plug: IP67 in plugged

state, lockable

#### **ELECTRICAL PARAMETERS**

NOCT<sup>4</sup>:  $44.8 \pm 2$  °C

At lower radiation intensities (200 W/m²), 97% of the STC module efficiency is achieved.

#### THRESHOLD VALUES

Maximum system voltage:  $1000 V_{DC}$ Reverse current load capacity: 16 A

Permissible operating

temperature: -40 °C to +90 °C

Max. load⁵: 5400 Pa





Additional information: www.solarnova.de

- <sup>2</sup> Tolerance: ±3 mm
- <sup>3</sup> Tolerance: ±1 mm
- <sup>4</sup> Normal operating cell temperature (NOCT)
- <sup>5</sup> Maximum load in accordance with IEC 61215



Quality management system certified in accordance with ISO 9001:2008

The current solarnova warranty conditions apply at the time of installation. Professional assembly in accordance with the applicable installation instructions is required for warranty to apply. Errors and changes expected. © solarnova 06/2017

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<sup>&</sup>lt;sup>1</sup> Typical values under standard test conditions (STC): 1 000 W/m<sup>2</sup> irradiation at the module level, Spectrum AM 1,5 and 25 °C cell temperature Power measurement tolerance (Pmax): ±3,5%