



ITS | INNOTECH
SOLAR

ITS Innotech Solar Module GmbH
Sales office | Sandstraße 26
80335 Munich | Germany
sales@innotechsolar.com
www.innotechsolar.com

Greener than Green

DesignBlack

The DesignBlack series meets the highest aesthetic standards. The module, with dark polycrystalline cells, a black back sheet and black frame, turns any plant into an eye-catcher due to the homogenous surface.

Durability

The high quality modules of ITS are manufactured exclusively in Sweden and pass through strict inspections during production. ITS's module factory has many years of manufacturing experience. Performance and long-term tests are conducted by independent institutes and excellent results are achieved.

Performance

Benefit from even more module power with our positive sorting in 10 Wp-steps, meaning you pay for the 250 Wp-class, but get modules that are flashed between 250 Wp und 259.9 Wp. Because of the special anti-reflection glass, ITS modules achieve an even higher yield.

Sustainability

In each of our production steps we follow our "greener than green" philosophy! ITS factories are subject to strict environmental regulations and rely on renewable energy sources.

Our distribution centers are strategically located to serve the emerging and most demanding markets, thereby reducing transportation distances which decreases our environmental impact.

Highlights

- European module production in Sweden
- PID test passed at Fraunhofer CSP
- Superb design
- Elegant black back sheet
- Higher yield because of anti-reflection glass
- A very homogenous cell image



DesignBlack – Poly

STC*

Pn	Wp	240	250	260
Vmpp	V	30.2	31.0	31.2
Impp	A	8.11	8.22	8.49
Voc	V	37.1	37.6	37.8
Isc	A	8.66	8.79	8.98
IR****	A	20	20	20
η	%	14.6 – 15.2	15.2 – 15.8	15.8 – 16.4

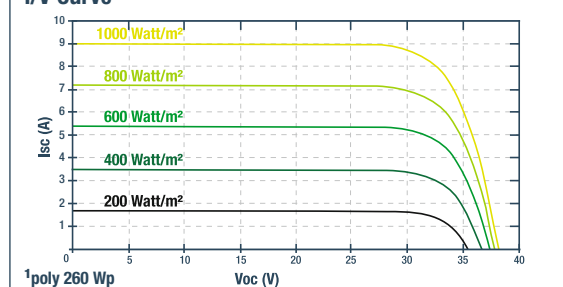
NOCT**

Pn	W	176	182	186
Vmpp	V	27.3	27.8	28.3
Voc	V	33.9	34.2	34.5
Isc	A	6.90	7.00	7.10

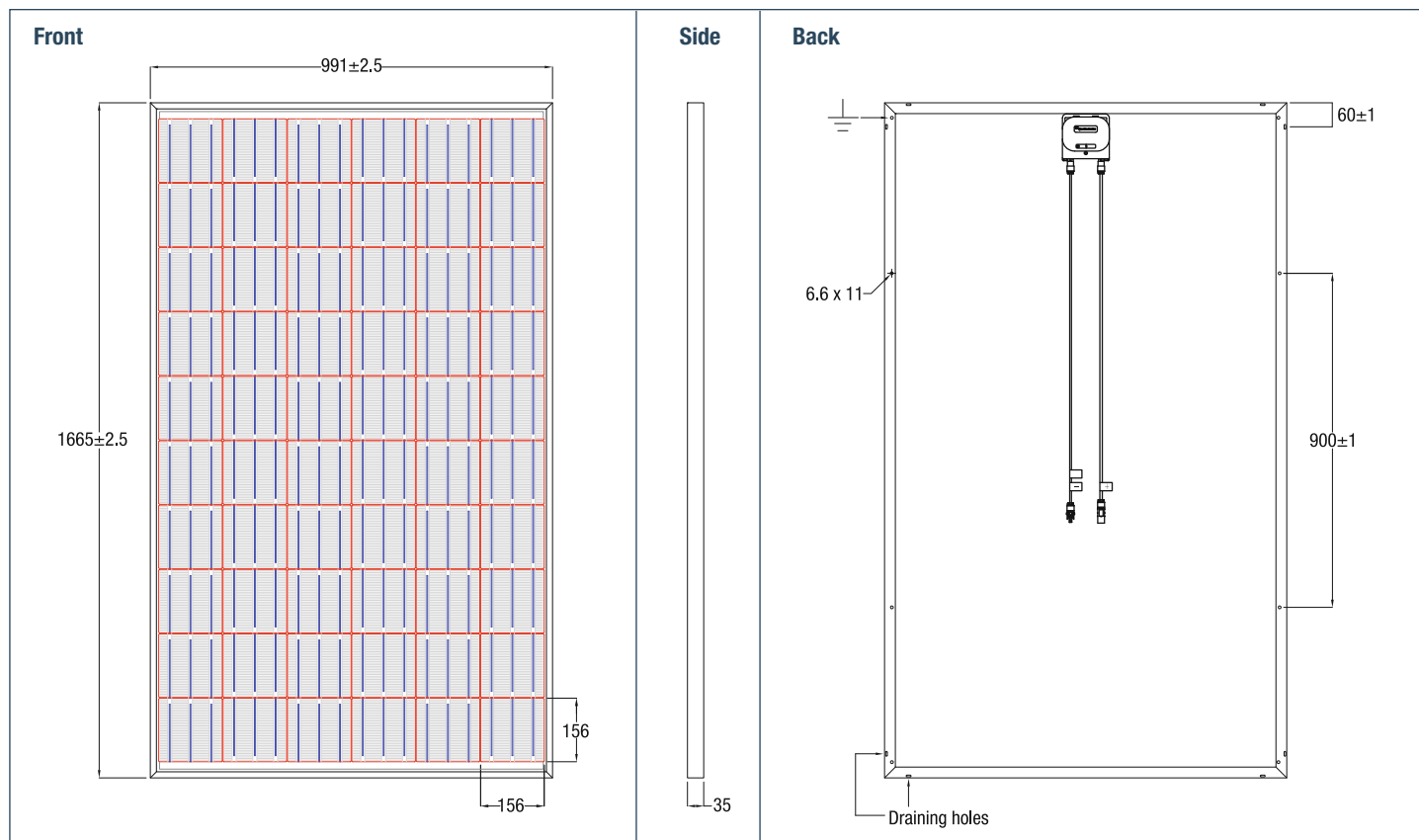
Temperature Coefficients

Pn	-0.38 %/K
Voc	-0.32 %/K
Isc	0.077 %/K

I/V Curve¹



NOCT**	51.7°C
Module efficiency reduction at 200 W/m ² ***	-0.6 (± 0.3)% abs.
Max. System Voltage	1000 V
IP protection level	IP 65
Module Design	Glass-foil (black)
Frame	Al black
Glass	Solar glass with anti-reflection surface treatment, 3.2 mm
No. and Type of Solar Cells	60 crystalline solar cells, 156 x 156 mm, 180 μm ± 30 μm
Cables	Junction box with MC4 (pluggable) connectors, cable: 2 x 1 m / 4 mm ²
Bypass-Diodes	3 pcs.
Dimensions (l x w x h)	1665 x 991 x 35 mm
Weight	19 kg
Operating Temperature Range	-40 ... +85°C
Mechanical ratings	Suction pressure of 2400 Pa approved (Wind speed 130 km/h with safety factor 3), load of 8000 Pa approved
Certification	IEC 61215:2005 IEC 61730 -1 / -2:2004 IEC 61701:1995 (salt mist resistant) MCS DLG Focus Test (ammonia resistant) UL 1703:2002 R5.12 CEC / CSI listing EN 13501-1 Class E
Positive sorting	-0 Wp / +10 Wp
Packing dimensions	1720 x 1045 x 1687 mm, 40 modules per pallet, 790 kg
Product warranty	12 years
Performance warranty	25 years linear performance warranty according to the Warranty Conditions of Innotech Solar



* STC – Standard Test Conditions, measurement conditions: intensity irradiation 1000 W/m², spectral distribution AM 1.5, temperature 25 ± 2°C, according to standard EN 60904-3

** NOCT – Normal Operation Cell Temperature, measurement conditions: irradiation intensity 800 W/m², AM 1.5, temperature 20°C, wind speed 1 m/s.

*** Reduced efficiency with the decrease in the intensity of irradiation of 1000 W/m² and 200 W/m², temperature 25°C according to EN 60904-1

**** Reverse current power rating: operation of the modules with an external power source is only permitted with a string fuse with a release current of < 2 x Isc @ STC*

Measuring tolerances of Pmax @ STC ± 3%, of reference module ± 2%, all other electric parameters ± 10%

This datasheet conforms to EN 50380. Innotech Solar reserves the right to change specifications without notice.