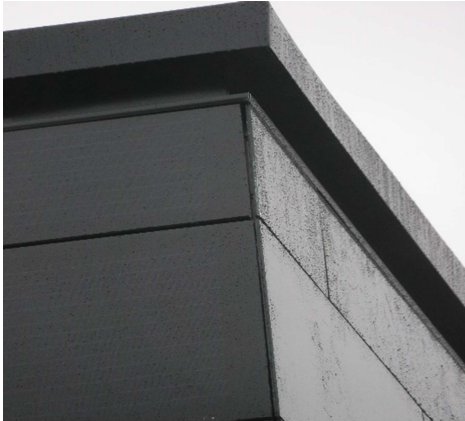


## *Innos Black Facade Greener than Green*



**The Innos Black Facade module is manufactured exclusively in Europe. Global leader in energy yield for solar modules.**

### **Environmental sustainability**

Innos follow its philosophy "greener than green" in each step of production process. We are motivated to achieve the best CO<sub>2</sub> balance within the PV industry. Innos Black Facade optional delivered in Zero version with best in class CO<sub>2</sub> sustainability certificate.

### **Durability**

Designed for maximum performance and minimum environmental impact. The high quality module of Innos pass through strict inspections during production and a doubling compared to standard cell test procedures. Performance and long-term tests are conducted by the independent institutes with results beyond standards.

### **Performance & Visibility**

Visible designed in material, sizes and appearances optimized for life time installations in buildings.

### **Quality control**

The production site allocates its own test equipment, to ensure the high quality of the manufactured modules.

Each module is measured and visually inspected. New module design and new components can be long term tested in own laboratory.

## **Highlights**

- Highest energy yield
- Glas-Glass extreme durability
- Produced in EU
- PID tested
- Visual design for building integration
- Flexible variation in design sizes

## Innos Black Façade Greener than Green

### STC\*

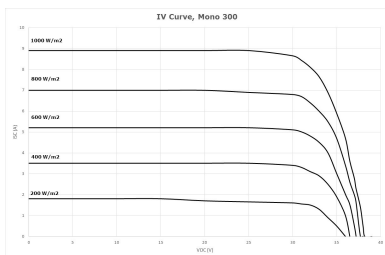
<b>Pn</b>	<b>Wp</b>	<b>295</b>	<b>300</b>
<b>Vmpp</b>	V	31,3	31,2
<b>Impp</b>	A	9,42	9,63
<b>Voc</b>	V	39,3	39,4
<b>Isc</b>	A	9,87	9,97
<b>IR****</b>	A	20	20
<b>η</b>	%	18,0	18,3

### NOCT\*\*

<b>Pn</b>	<b>W</b>	<b>215</b>	<b>219</b>
<b>Vmpp</b>	V	28,2	28,4
<b>Voc</b>	V	36,2	36,3
<b>Isc</b>	A	7,99	8,07

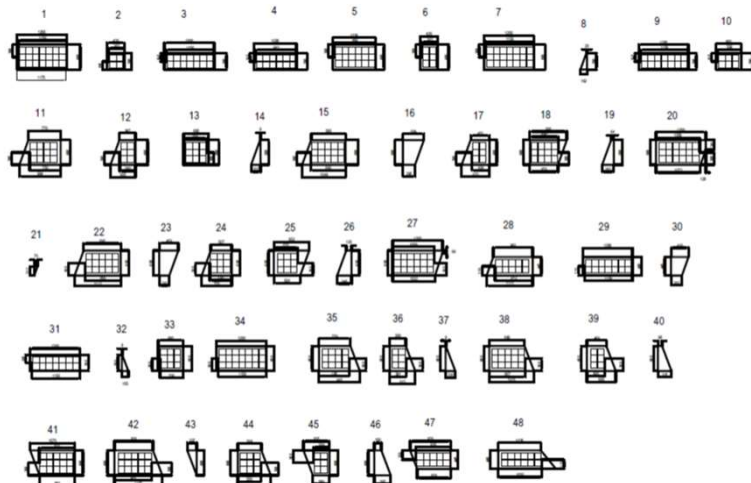
### Temperature Coefficients

<b>Pn</b>	-0,40%/K
<b>Voc</b>	-0,29%/K
<b>Isc</b>	0,050%/K



NOCT**	46 °C
Module efficiency reduction at 200W/m2***	-0,6(+/-0,3%) abs.
Max. system voltage	1000V
IP Protection level	IP67
Module design	Glass-Glass with laminated colored foil
Frame	Frameless
Glass	2 layer solarglass with treatment. 3,2mm
No. & type of Solar Cells	Mono crystalline solar cells 156*156mm
Cables	Junction box with MC4 pluggable connectors. Cable 2*0,9m/4mm <sup>2</sup>
Bypass-Diodes	upp to 3 pcs depending on number of cells
Dimensions (l*w*h)	Up to 1630*982*7mm @ 60 cells
Weight	30,2kg at maximum size
Operating temp. Range	-40 to +85 °C
Mechanical ratings	Suction pressure of 2400Pa approved (wind speed 130km/h with safety factor 3), load 2400 Pa approved
Approvals	IEC61215:2005 IEC61730-1/-2:2004 IEC61701:1995 (salt mist) EN50583-1_2016 EN12600 EN12150 EN572-2
Positive sorting	0Wp/+5Wp
Product warranty	12 years
Performance warranty	12 years 90%/30 years 85% output power

The Innos Black Façade module is produced in a wide variation of format, sizes and colors. Due to that fact the specification above only present the general values for the product. A more precise product definition will follow the delivered product.



\* STC - Standard Test Conditions, measurement conditions: intensity irradiation 1000 W/m<sup>2</sup>, spectral distribution AM 15, temperature 25 +/- 2°C, according to standard EN60904-3.  
 \*\* NOCT - Normal Operating Cell Temperature, measurement conditions: irradiation intensity 800 W/m<sup>2</sup>, AM 15, temperature 20°C, wind speed 1m/s.  
 \*\*\* Reduced efficiency with the decrease in the intensity of irradiation of 1000 W/m<sup>2</sup> and 200 W/m<sup>2</sup>, temperature 25°C according EN60904-1.  
 \*\*\*\* Reverse current power rating: operation of the module with an external power source is only permitted with a string fuse with a release current of <2xIsc @ STC.  
 Measuring tolerance of Pmax @ STC +/- 3%, of reference module +/- 2%, all other electrical parameters +/- 10%.