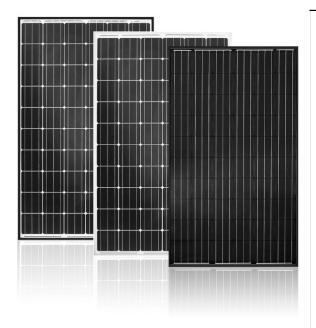


# Innos Hold Greener than Green



The Innos Hold facade module is manufactured exclusively in Europé. 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  $\mathrm{CO}_2$  balance within the PV industry. Innos Hold optional delivered in Zero version with best in class  $\mathrm{CO}_2$  sustainability certificate.

# **Durability**

Design based on standard production process and module size. Enforced, and certified, for BIPV standards, 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 sizes and appearances to the standard module footprint. Optimized for life time installations in buildings. Available with either black mono or blue poly cells, grey or black frame, white or black backsheet and in addition black covered busbars.

# **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**

- Global Lowest Carbon footprint
- Designed in Scandinavia
- Produced in EU
- PID tested
- Unique hotspot-prevention
- Optimized Innos yield design, +5Wp
- Designed for building integration
- Variation in optical expressions



# **Innos Hold Greener than Green**

### STC\* 270 Poly 275 Poly Pn Wp Vmpp 31.0 31.1 Impp 8,81 8,94 Voc 39,1 39,3 9,45 9,58 Isc IR\*\*\*\* 20 20 16,4-17,0 16,7-17,3 ŋ

## NOCT\*\*

Pn	W	190	196
Vmpp	V	28,5	28,9
Voc	V	35,4	36,0
Isc	Α	7,09	7,16

### **Temperature Coefficients**

Pn	-0,41%/K
Voc	-0,30%/K
Isc	0,040%/K

31C**			
Pn	Wp	300 Mono	310 Mono
Vmpp	V	31,2	31,5
Impp	A	9,63	9,85
Voc	V	39,4	39,8
Isc	Α	9,97	10,10
IR****	Α	20	20
ŋ	%	18,3	18,5

## NOCT\*\*

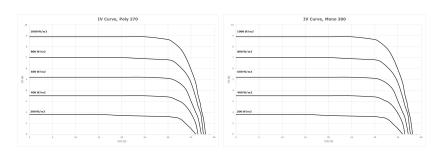
Pn	W	215	219
Vmpp	V	28,2	28,4
Voc	V	36,2	36,3
Isc	A	7,99	8,07

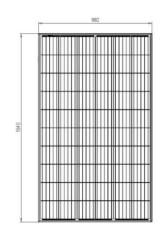
# Temperature Coefficients

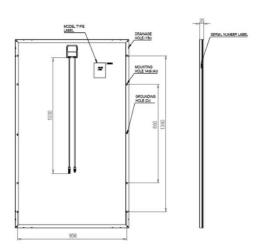
p	
Pn	-0,40%/K
Voc	-0,29%/K
Isc	0.050%/K



NOCT**	46 °C
Module efficiency reduction	-0,6(+/-0,3%) abs.
at 200W/m2***	
Max. system voltage	1000V
IP Protection level	IP67
Module design	Glass-foil (white or black)
Frame	Al (silver or black)
Glass	Solarglass with treatment. 3,2mm
No. & type of Solar Cells	60 Mono or Polycrystaline solar cells 156*156mm, 180 μm
Cables	Junction box with MC4 pluggable connectors.
	Cable 2*1m/4mm <sup>2</sup>
Bypass-Diodes	3 pcs.
Dimensions (I*w*h)	1640*992*35
Weight	19kg
Operating temp. Range	-40 to +85 °C
Mechanical ratings	Suction pressure of 2400Pa approved (wind speed 130km/h
	with safety factor 3), load 5400 Pa approved
Certification	IEC61215:2005
	IEC61730-1/-2:2004
	IEC61701:1995 (salt mist)
	EN50583-1_2016 Category A-D
	EN12600
	EN12150
	EN12543-4 / DIN52338
Positive sorting	0Wp/+5Wp
Product warranty	12 years
Performance warranty	12 years 90%/25 years 85% output power







- STC Standard Test Conditions, measurement conditions: intensity irradiation 1000 W/m2, spectral distribution AM 1,5, temperature 25 +/- 2°C, according to standard EN60904-3.
- NOCT Normal Operating Cell Temperature, measurement conditions: irradiation intensity 800 W/m2, AM 15, temperature 20°C, wind speed 1m/s. Reduced efficiency with the decrease in the intensity of irradiation of 1000 W/m2 and 200 W/m2, temperature 25°C according EN00004-1. Reverse current power rating: operation of the module with an external power source is only permitted tha string fuse with a release current of <2xlsc @ STC. Measuring tolerance of Pmax @ STC +/- 3%, of reference module +/- 2%, all other electrical parameters +/- 10%.

