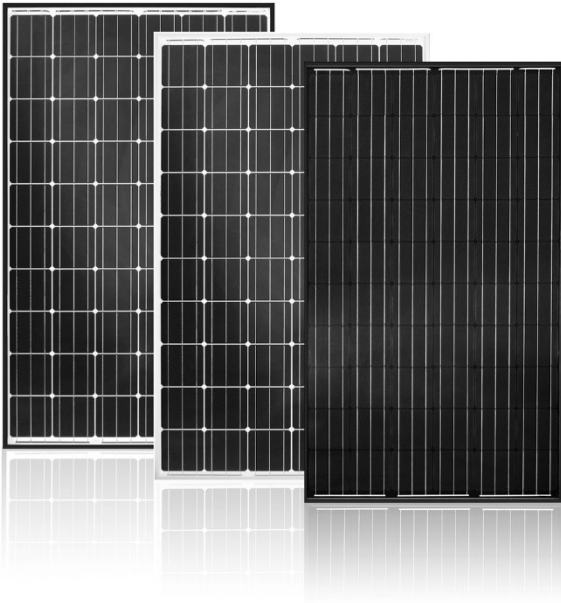


Innos Zero Black – Low CO₂ Greener than Green



The Innos Zero Black module is manufactured exclusively in Europe. Global leader in low CO₂ footprint 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 CO₂ balance within the PV industry. Innos Zero has only -50% carbon footprint than conventional module producers.

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

Benefit from more module power from our positive sorting in +5Wp-steps.

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. Furthermore 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

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STC*

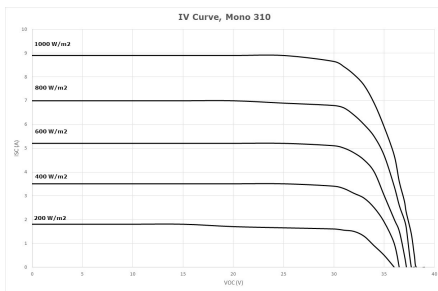
Pn	Wp	300 Mono	310 Mono
Vmpp	V	32,9	33,2
Impp	A	9,13	9,34
Voc	V	40,0	40,3
Isc	A	9,80	10,28
IR****	A	20,0	20
η	%	18,0	18,6

NOCT**

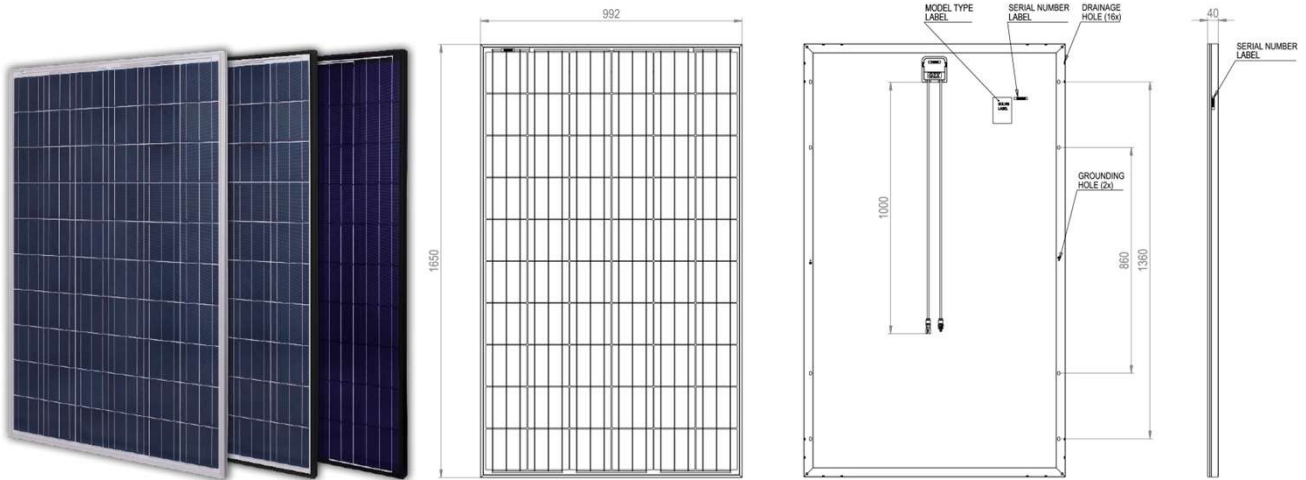
Pn	W	215	219
Vmpp	V	28,2	28,4
Voc	V	36,2	36,3
Isc	A	7,99	8,07

Temperature Coefficients

Pn	-0,42%/K
Voc	-0,33%/K
Isc	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-foil (white or black)
Frame	Al silver or black
Glass	Solarglass with treatment. 3,2mm
No. & type of Solar Cells	60 Mono crystalline solar cells 156*156mm, 180 μm
Cables	Junction box with MC4 pluggable connectors. Cable 2*1m/4mm ²
Bypass-Diodes	3 pcs.
Dimensions (l*w*h)	1640*992*35
Weight	18kg
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	IEC61215:2016 IEC61730:2016 IEC61701:1995 (salt mist) MCS DLG Focus Test (ammonia) UNI9177 class 1 EN13501-1 Class E
Positive sorting	0Wp/+5Wp
Product warranty	12 years
Performance warranty	12 years 90%/32 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 1.5, 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 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%.