energetica
Future made in Austria

From visions to reality, from ideas to innovation, from sun to energy.

From Austria.
For almost 30 years.

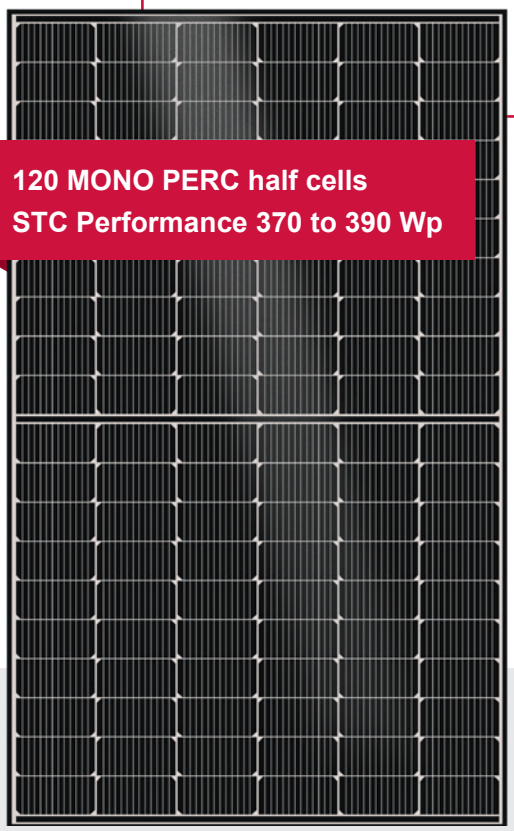
ISP® M HC

CLASSIC

120 MONO PERC half cells
STC Performance 370 to 390 Wp

e.ISP® M HC

CLASSIC



e.ISP®-Technology

e.ISP (energetica Integrated Shadow Protection) improves the efficiency of the modules and optimizes their energy yield in sunny and shaded conditions.

12-BB-Technology

12-busbar half cell technology for optimized shading, highest efficiency and improved reliability due to shorter electron paths.

e.STAK®
Strong, Stable and Sustainable.

The e.STAK stacking and packaging system from energetica ensures that the modules arrive at their destination stable and without microcracks: In the stack, the specially developed frame profiles of the modules interlock. In combination with the film, they form a stable unit.

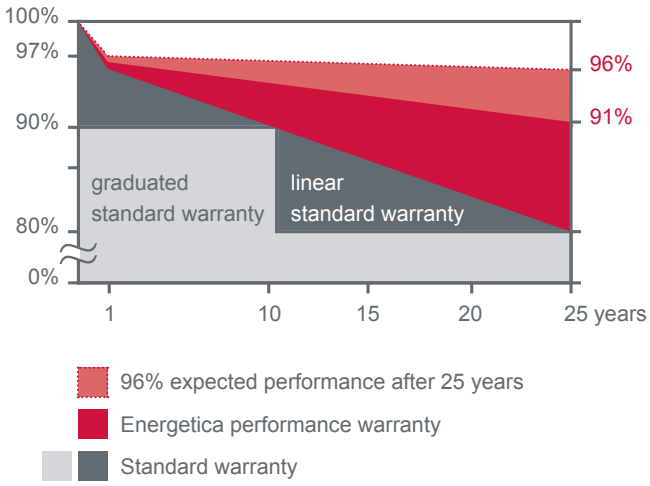
Slipping of the modules on the pallet becomes virtually impossible. The packaging material is reduced to the bare minimum. Moreover, the film used is made of biogenic plastic.

More power guaranteed.

The patented e.ISP technology increases the energy yield, and reduces the degradation (wear) of the cells. Extensive testing suggests that energetica PV modules - even after 25 years of operation - will perform at the impressive rate of 96 percent.

That‘s why, in addition to a 17-year product warranty, we offer a linear performance guarantee* of 91 percent of initial performance after 25 years.

**For details of the performance guarantee, see Energetica Approved Warranty in the first year 97% of the rated power and at least 91% of the rated power in the 25th year.*



e.Classic M HC Technical data

Electrical data (STC)

Type	370	375	380	385	390
Maximum power P_{Max} [Wp]	370.00	375.00	380.00	385.00	390.00
MPP voltage U_{MPP} [V]	34.65	34.98	34.80	34.94	35.03
MPP current I_{MPP} [A]	10.74	10.74	10.92	11.02	11.16
Open circuit voltage U_{OC} [V]	41.33	41.50	41.70	41.89	41.93
Short circuit current I_{SC} [A]	11.33	11.40	11.69	11.80	11.95
Module efficiency η_{Modul} [%]	20.00%	20.27%	20.54%	20.81%	21.08%
Performance sorting [Wp]	0/+5	0/+5	0/+5	0/+5	0/+5

These measurements are valid under standard test conditions STC. All electrical data ±10%. Measurement uncertainty P_{MPP} (P_{Max}): +/- 3%, (Airmass AM 1.5; radiation of 1000W/m²; cell temperature 25°C)

Electrical data (NMOT)

Type	370	375	380	385	390
Maximum power (P_{Max}) [Wp]	279.13	286.73	294.42	302.22	310.12
MPP voltage U_{MPP} [V]	32.54	32.98	33.42	33.86	34.30
MPP current I_{MPP} [A]	8.58	8.69	8.81	8.93	9.04
Open circuit voltage (V_{OC}) [V]	38.88	39.41	39.93	40.46	40.98
Short circuit current I_{SC} [A]	9.06	9.18	9.30	9.43	9.55

NMOT (Nominal Module Operating Temperature): Irradiance 800 W/m², ambient temperature 20 °C, wind speed 1 m/s. All technical data +/- 10 %

Permissible operating conditions

Temperature range	-40°C to +90°C
Maximum system voltage	1,000 V, 1,500 V upon request
Test $load_{max}$	tested according to IEC up to 5.4 kPa snow / 2.4 kPa wind
Breaking load	> 6.0 kPa
Hail resistance	hailstone up to 25 mm Ø at 46 m/s v_{impact} hailstone up to 40 mm Ø at 27.5 m/s v_{impact}
Maximum reverse current	16 A*

**In any case, due to the integrated active electronics, it must be ensured that there are no reverse currents greater than 16 A.*

Temperature coefficient (Tc)

Tc short circuit current α	0.05 %/°C
Tc open circuit voltage β	-0.26 %/°C
Tc maximum power γ	-0.33 %/°C
NMOT	43.5°C +/- 2

Note: This data sheet is a legally binding document and, along with the assembly instructions, is part of the proper documentation according to OVE EN 50380. Due to constant technical innovation, R&D and improvements, the above specifications are subject to change accordingly. Energetica Industries has the sole right to make these changes at any time without notice. The data given is without guarantee. Product representations are symbolic images and can partly differ from the original in terms of appearance and data.

qualityaustria
SYSTEM CERTIFIED
ISO 9001:2015 No.25533/0
ISO 14001:2015 No.04292/0
ISO 45001:2018 No.01106/0

Certifications

Certifcations / product tests	IEC 61215, IEC 61730 IEC 62716 (Ammonia corrosion test) IEC 61701 (Salt mist corrosion test) EN 61000-4-2 EN 61000-4-4 EN 61000-4-5 EN 61000-4-6 Safety Class II PID, LID, LeTID
Module fire performance	Class C, Fire class 1 (Italy)

Warranties

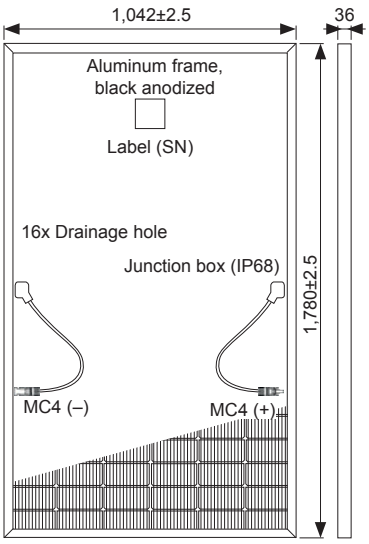
Product warranty	17 years
Output warranty of P_{MAX} (Measurement tolerance ± 3%)	25 years linear acc. warranty conditions

Mechanical Data

Dimensions (HxWxD)	1,780 x 1,042 x 36 mm
Weight	21 kg
Front glass	transparent tempered anti-reflective 3.2 mm glass
Backsheet	highly reflective PET
Frame	black anodized aluminum
Cells	20 x 6 high efficiency solar half cells (166 x 83 mm)
Cell type	mono PERC, 12 busbars
Bypass control	active electronics at string level
Modul connector	4 mm² solar cabel (+,-) 1,150 mm
Connectors	multi-contact MC4, IP68
Origin	Made in Austria

Paletts / Truck load

Pieces per palett	30
Pieces per truck	840



All indicated dimensions in mm

data sheet

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High-performance photovoltaic. Made in Austria

Energetica Photovoltaic Industries produces **high-performance photovoltaic modules** that are among the most technically advanced products in the industry worldwide. Energetica currently employs around **100 people** and the factory in **Liebenfels/Austria** is currently one of the most modern production facilities for PV modules in Europe.

The **manufacturing process is very climate-friendly:** a large part of the energy required for this comes from a **2.6 MW PV power plant on the factory premises,** which is equipped exclusively with energetica PV modules manufactured on site.

energetica

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Uncompromising, efficient and classic.

Uncompromising efficiency and classic design. e.Classic M HC was developed for applications where the highest performance must be achieved in the smallest area. This is exactly where the elegant e.Classic M HC can show its strengths to the full.

The most efficient module currently available from energetica achieves up to 390 Wp with 120 monocrystalline half-solar cells behind 3.2 mm glass, as well as the highest power and stability in its class. In addition, there is a highly reflective back sheet and a black aluminum frame.