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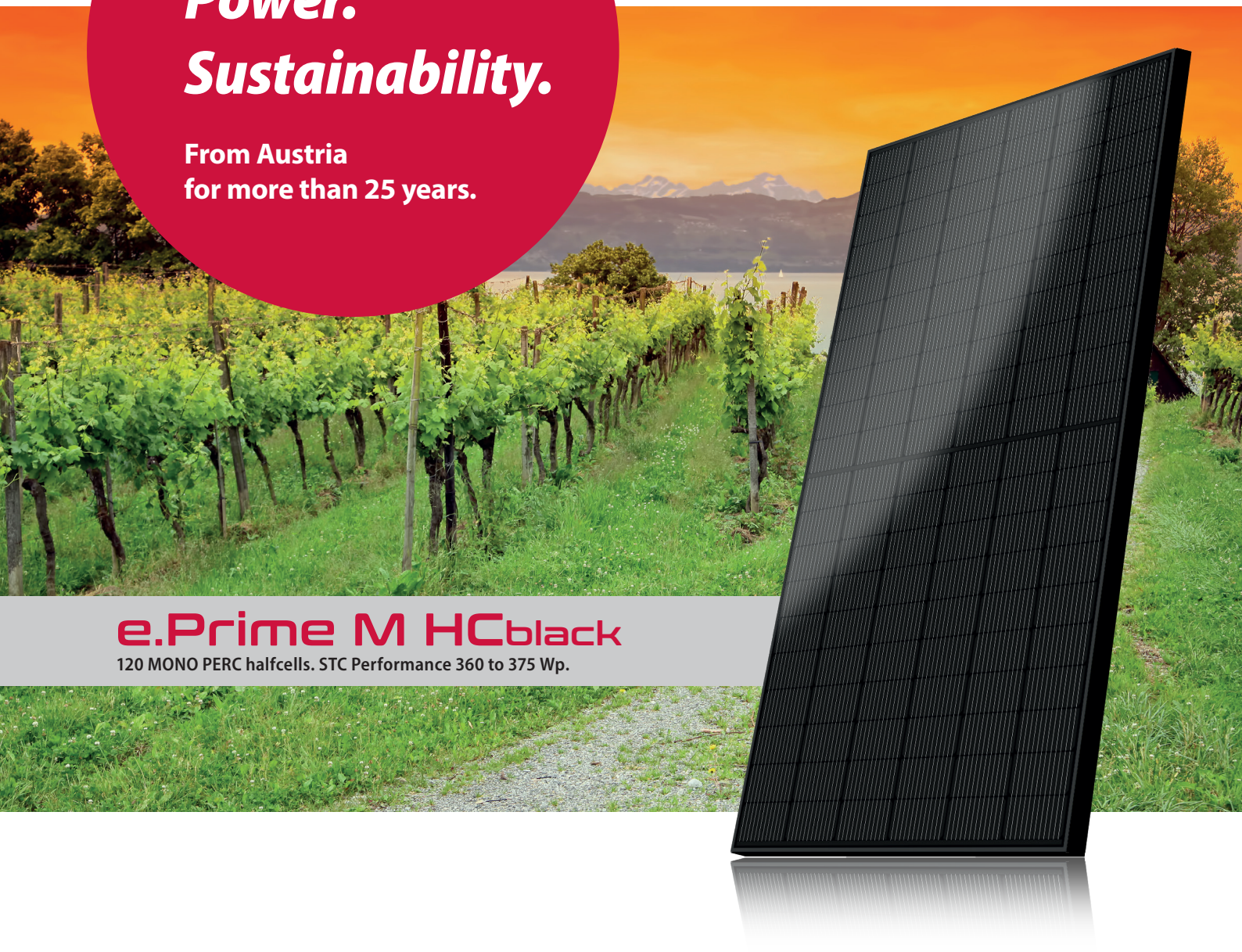
PHOTOVOLTAIC INDUSTRIES

Innovation. Power. Sustainability.

From Austria
for more than 25 years.



e.Prime M HCblack

120 MONO PERC halfcells. STC Performance 360 to 375 Wp.

Data sheet

energetica-pv.com

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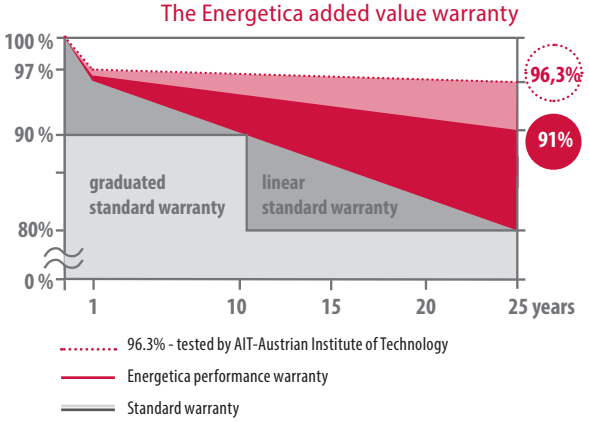
Innovation. Power. Sustainability. From Austria for more than 25 years.

Energetica Photovoltaic Industries GmbH is an Austrian photovoltaic technology company based in Liebenfels.
25 years of industry experience result in our high-tech product portfolio, which is developed, tested and manufactured in a climate-neutral manner in one of the world's most modern 4.0 production facilities for PV modules.

e.STAK®- Strong. Stable. Sustainable.

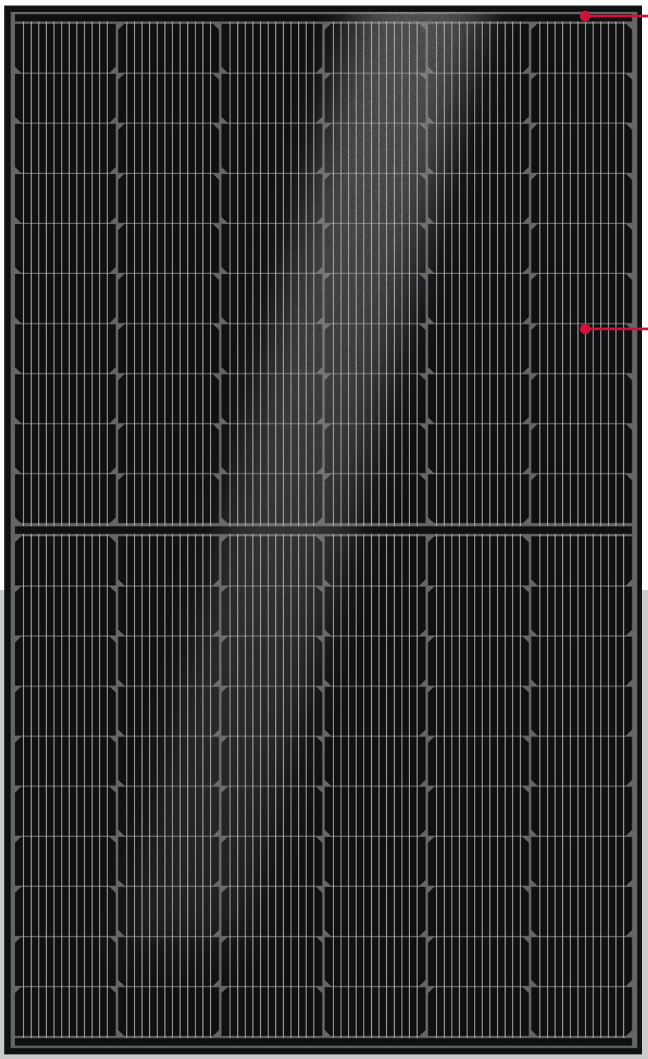
Energetica's e.Prime series is designed for extreme weather conditions: 46 mm thick frame profiles and robust 4 mm glass allow the PV modules to withstand snow loads of up to 8000 Pa and wind loads of up to 3000 Pa.
Energetica's e.STAK stacking and packaging system ensures that the modules arrive at their destination stable and without micro-cracks: In the stack, the specially developed frame profiles of the modules interlock. In combination with the wrapping foil, they thus 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 biodegradable plastic.



More performance guaranteed.

The patented e.ISP technology increases the energy yield, and reduces the degradation (wear) of the cells. Based on extensive testing, the AIT-Austrian Institute of Technology certifies the performance of Energetica modules to an impressive 96.3 percent even after 25 years.
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 (added value 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.

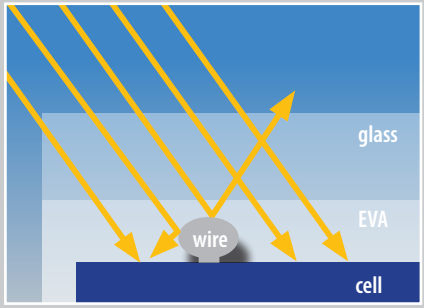


e.ISP®-TECHNOLOGY

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

For optimized shading, highest efficiency and improved reliability due to shorter electron paths.
Result: the cell surface is used more effectively and the energy yield increases for the same module size.



12-busbar-technology

e.Prime M HCblack

Photovoltaic module with 120 MONO PERC half cells. STC Performance 360 to 375 Wp

Uncompromising. Efficient. Black.

Efficiency and elegant design. e.Prime M HC black was developed for users who value yield, stability and aesthetics in equal measure. Because Energetica's most efficient Pure Black PV module to date enhances any building and defies high snow and wind loads:
375 Wp from 120 monocrystalline half solar cells under 4 mm glass and a 46 mm frame result in the highest power and stability in its class.
A black back foil and a black aluminum frame complete the look of the Pure Black design.

e.Prime M HCblack

Technical data

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Electrical data (STC)

Type	360	365	370	375
Maximum power P_{Max} [Wp]	360,00	365,00	370,00	375,00
Open circuit voltage U_{OC} [V]	41,00	41,17	41,33	41,50
MPP voltage U_{MPP} [V]	34,09	34,37	34,65	34,98
MPP current I_{MPP} [A]	10,60	10,67	10,74	10,74
Short circuit current I_{SC} [A]	11,19	11,26	11,33	11,40
Module efficiency η_{Modul} [%]	19,48%	19,77%	20,06%	20,27%
Performance sorting [Wp]	0/+5	0/+5	0/+5	0/+5

These measurements are valid under standard test conditions STC. All electrical data ±10%. Measurement uncertainty PMPP (PMax): +/- 3%, (Airmass AM 1,5; radiation of 1000W/m2; cell temperature 25°C)

Electrical data (NMOT)

Type	360	365	370	375
Maximum power (P_{Max}) [Wp]	268,90	272,90	276,90	286,73
MPP voltage U_{MPP} [V]	32,00	32,26	32,52	32,98
MPP current I_{MPP} [A]	8,40	8,46	8,51	8,69
Open circuit voltage (V_{OC}) [V]	38,51	38,67	38,82	39,41
Short circuit current I_{SC} [A]	8,86	8,91	8,97	9,18

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

Electrical data (Low Irradiance)

Typ	360	365	370	375
Maximale Leistung (P_{Max}) [Wp]	68,69	69,72	70,87	72,80
Betriebsspannung im MPP U_{MPP} [V]	32,83	33,10	33,37	33,83
Betriebsstrom im MPP I_{MPP} [A]	2,09	2,11	2,12	2,15
Leerlaufspannung (V_{OC}) [V]	38,43	38,59	38,74	39,26
Kurzschlussstrom I_{SC} [A]	2,21	2,23	2,24	2,27

Permissible operating conditions

Temperature range	-40°C bis +90°C
Maximum system voltage	1.000 V, 1500 V auf Anfrage
Test load$_{max}$	tested according to IEC up to 8 kPa snow/5,5 kPa wind
Breaking load	> 10 kPa
Hail resistance	hailstone up to 25 mm Ø at 165,6 km/h v_{impact} hailstone up to 55 mm Ø at 120,6 km/h v_{impact}
maximum reverse current	16 A*

ATTENTION! In any case, it must be ensured that there are no reverse currents greater than 16 A.

Temperature coefficient (Tc)

Tc short circuit current α	0,05 %/K
Tc open circuit voltage β	-0,26 %/K
Tc maximum power γ	-0,33 %/K
NMOT	43,5°C +/- 2

Certifications and warranties

Certifications	IEC 61215, IEC 61730 IEC 62716 (Ammonia corrosion test) IEC 61701 (Salt mist corrosion test) ISO 9001, ISO 14001, ISO 45001 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)
Product warranty	20 years
Output warranty of P_{MAX}	25 years linear, acc. warranty conditions

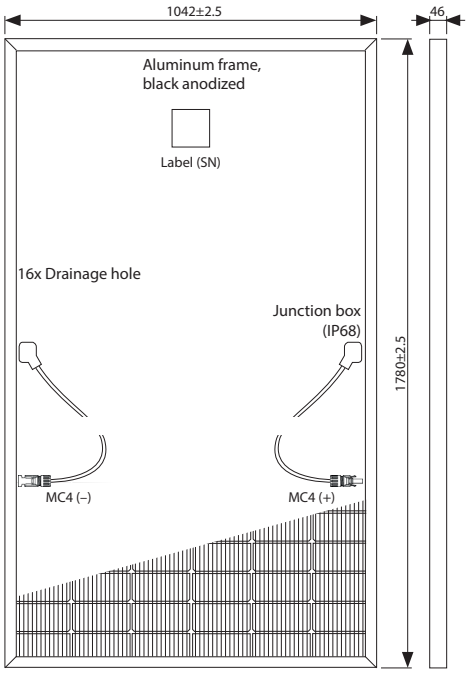
Mechanical Data

Dimensions HxWxD	1780 x 1042 x 4 6 mm
Weight	25 kg
Front glass	transparent tempered anti-reflective glass 4 mm
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 (+,-) 1150 mm
Connectors	multi-contact MC4, IP68
Origin	Made in Austria

Paletts / Truck load

Pieces per palett	23
Pieces per truck	644

All indicated dimensions in mm



Version: 14072022_ePrime_M_HC_black

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.

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