



MADE IN ITALY



# Monocrystalline Photovoltaic Module

## Half Cut 440 - 460 W

MPS HC



**Italian production plant**  
assembling with european components



**144 cells** | M6 Technology



**Gallium-doped** Technology



**Planet-Friendly**  
Made from more sustainable materials



**20 years** Product Warranty  
**25 years** Linear Warranty

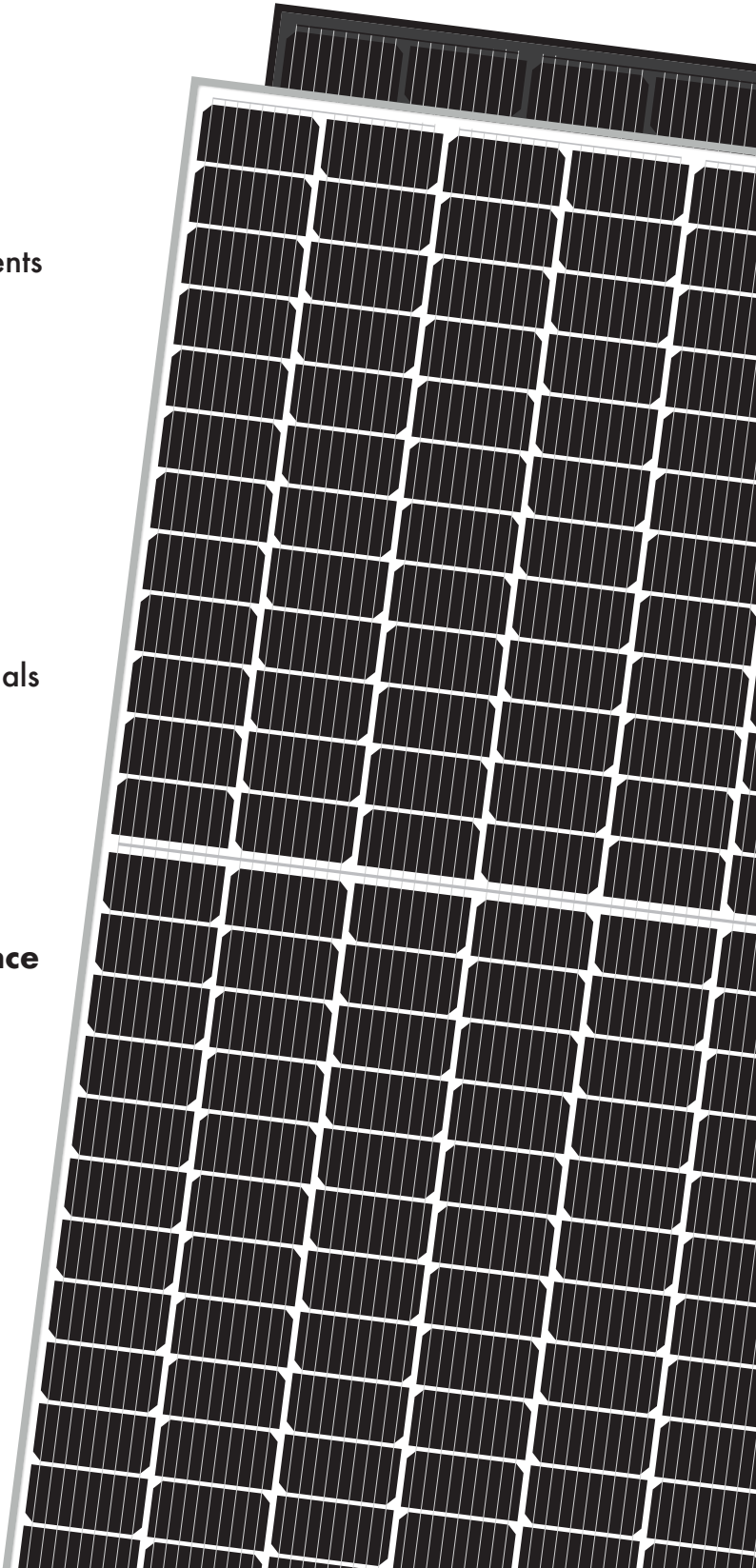


Guaranteed **mechanical resistance**  
under extreme weather conditions



**Lower LCOE**  
(Levelized Cost of Energy)

[www.solarday.it](http://www.solarday.it)



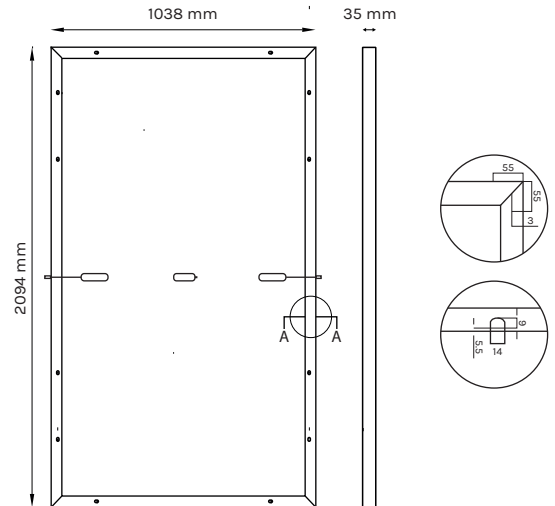
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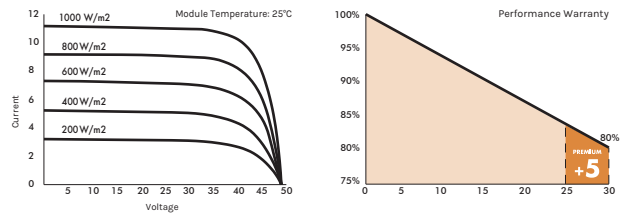
### TECHNICAL FEATURES

<b>Cells:</b>	144 (6x24) Monocrystalline Silicon
<b>Available in:</b>	
<b>Frontal Glass:</b>	Glass with low iron content ARC - thickness 3,2 mm Frontal load (snow) 5400 Pa Back load (wind) 2400 Pa
<b>Encapsulant:</b>	EVA (Etilen Vinil Acetato)
<b>Backsheet:</b>	Polymer sheet white/black
<b>Frame:</b>	Black/Silver anodized aluminum 15 micron Grounding holes (For more information please contact our sales team)
<b>Junction Box:</b>	IP68 - 1500 V with 3 by pass diodes Cables length 120 cm Section: 4,0 mm <sup>2</sup> ± 1% tolerance
<b>Connectors:</b>	MC4 or compatible connector



### WEIGHT, DIMENSIONS AND PACKAGING

23 Kg | 2094 mm x 1038 mm x 35 mm | 31 pcs pallet | 744 pcs truck



### ELECTRICAL CHARACTERISTICS\*

	MPS HC 440W		MPS HC 445W		MPS HC 450W		MPS HC 455W		MPS HC 460W	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
<b>Peak power: Pmax (W)</b>	440	324	445	327	450	330	455	333	460	336
<b>Voltage Pmax: Vmpp (V)</b>	41.16	37.81	41.36	37.91	41.56	38.02	41.75	38.15	41.96	38.23
<b>Current Pmax: Impp (A)</b>	10.69	8.57	10.76	8.63	10.83	8.68	10.90	8.73	10.96	8.79
<b>Open circuit voltage: Voc (V)</b>	49.47	45.39	49.67	45.43	49.87	45.45	50.06	45.49	50.25	45.53
<b>Short-circuit current: Isc (A)</b>	11.16	8.95	11.23	9.02	11.30	9.09	11.37	9.16	11.44	9.24
<b>Classification tolerance:</b>	0/+5 W		0/+5 W		0/+5 W		0/+5 W		0/+5 W	
<b>Maximum system voltage: (V)</b>	1500		1500		1500		1500		1500	
<b>Module efficiency: (%)</b>	20.24		20.47		20.70		20.93		21.16	
<b>Maximum fuse rating: (A)</b>	20		20		20		20		20	

\*STC values: 1000W/m<sup>2</sup>, AM 1.5, temperature 25°C. Measurement tolerance +/-3% (AAA Solar simulation - IEC 60.904-9-).

### TEMPERATURE CHARACTERISTICS

<b>Temperature Coeff. of Voc:</b>	-0,27 % / °C
<b>Temperature Coeff. of Isc:</b>	+0,05 % / °C
<b>Temperature Coeff. of Pmax:</b>	-0,35 % / °C

### OPERATIVE CHARACTERISTICS

<b>Operating Temperature:</b>	from -40°C to +85°C
<b>Hailstorm Resistance:</b>	Ø 25 mm, 86 Kg/h
<b>NMOT*:</b>	45 ± 2 °C

\*Nominal Module Operating Temperature: Irradiance 800W/m<sup>2</sup>; Temperature 20°C; Wind speed 1m/s

### WARRANTIES

**20 YEARS**  
Product Warranty

**25 YEARS**  
Linear Warranty

PREMIUM  
**+5**

### SOLARDAY CERTIFICATES

IEC 61215:2016 | EN 61730-1:2016 | EN 61730-2:2016  
UNI 9177 Class 1 Fire Class | FIRE TEST MST23 CLASSE C  
IEC 62716:2013 | IEC 61701:2011  
ECOEM

UNI EN ISO 9001:2015  
UNI EN ISO 14001:2015  
UNI EN ISO 45001:2018  
CE

VKF  
SUNDAHUS  
BRGB  
MCS

Read the instruction manual for this product before proceeding with the installation. In light of continuous technical development, all information in this brochure may be modified by Solarday without notice.

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