

**SMART VITRUM**



# Monocrystalline Photovoltaic Module

## **Glass-Glass 410 - 430 W**

TEN HCD



**Italian production plant**  
assembling with european components



**108 cells** | M10 Technology



**Customized production**  
All Black aesthetic



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



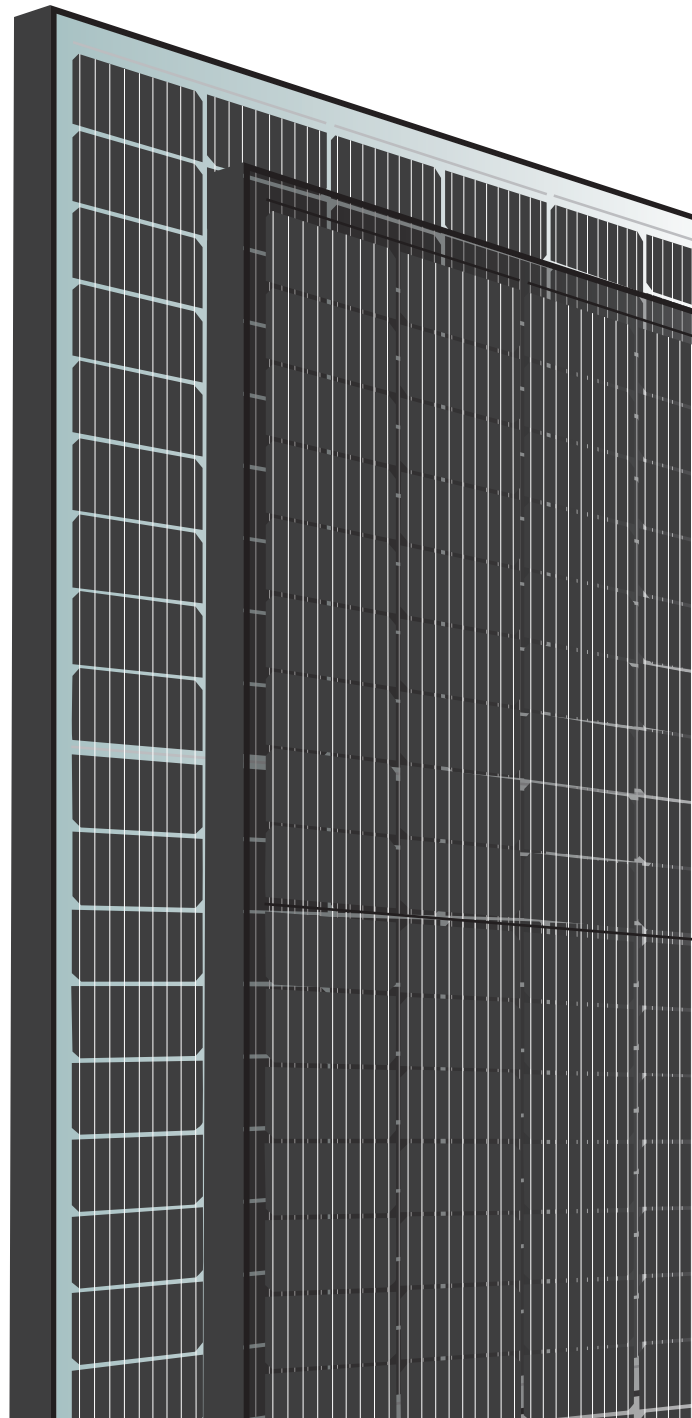
**30 years** Product Warranty  
**30 years** Linear Warranty



**High quality double glass** and strong  
resistance in extreme weather conditions



**Maximized results**  
thanks to cutting-edge technology



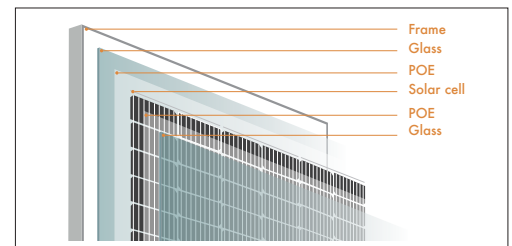
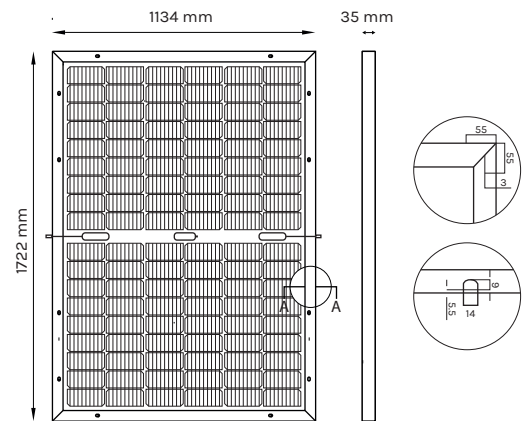
[www.solarday.it](http://www.solarday.it)

# Monocrystalline Photovoltaic Module Glass-Glass 410 - 430 W TEN HCD



## TECHNICAL FEATURES

<b>Cells:</b>	108 (6x18) Monocrystalline Silicon <b>Available in:</b> 
<b>Frontal Glass:</b>	Coated semi-tempered glass Thickness 2 mm
<b>Back Glass:</b>	Semi-tempered glass Thickness 2 mm
<b>Encapsulant:</b>	POE (PolyOlefin Elastomer)
<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 mm2 ± 1% tolerance
<b>Connectors:</b>	MC4 or compatible connector



## WEIGHT, DIMENSIONS AND PACKAGING

24 Kg | 1722 mm x 1134 mm x 35 mm | 31 pcs pallet | 930 pcs truck

## ELECTRICAL CHARACTERISTICS\*

	TEN HCD 410W		TEN HCD 415W		TEN HCD 420W		TEN HCD 425W		TEN HCD 430W	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
<b>Peak power: Pmax (W)</b>	410	311	415	315	420	318	425	322	430	326
<b>Voltage Pmax: Vmpp (V)</b>	31.51	29.61	31.70	29.82	31.90	30.00	32.10	30.21	32.31	30.36
<b>Current Pmax: Impp (A)</b>	13.02	10.52	13.10	10.56	13.17	10.62	13.24	10.68	13.32	10.75
<b>Open circuit voltage: Voc (V)</b>	37.50	35.80	37.70	36.00	37.90	36.21	38.10	36.40	38.31	36.60
<b>Short-circuit current: Isc (A)</b>	13.82	11.14	13.91	11.22	13.98	11.27	14.06	11.34	14.13	11.38
<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>	20.99		21.25		21.50		21.76		22.02	
<b>Maximum fuse rating: (A)</b>	25		25		25		25		25	

\*STC values: 1000W/m2, AM 1.5, temperature 25°C. Measurement tolerance +/-3% (AAA Solar simulation - IEC 60.904-9).

## TEMPERATURE CHARACTERISTICS

<b>Temperature Coeff. of Voc:</b>	-0,25 % / °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/m², Temperature 20°C, Wind speed 1m/s

## WARRANTIES

**30 YEARS**  
Product Warranty

**30 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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