

SOLO[®]

Lightweight, truly Circular and Low Carbon footprint

470 ~ 520 Wp

Mono PERC - 72 cells

- ✓ Strong and light polymers result in a weight of only 5,5kg/m²
- ✓ 60% better carbon footprint than conventional modules
- ✓ Designed for circularity
- ✓ PFAS-free

25 years

Power warranty

16 years

Product warranty

Certifications & Quality Standards

IEC 61215/61730

IEC 62716 (Ammonia)

IEC 61701 (Salt)

IEC 60068-2-68 (Sand)

ISO 9001*: Quality Management System

ISO 14001*: Environmental Management Systems

ISO 45001*: Occupational Health and Safety Management Systems * Pending



Full specs

Electrical Characteristics

Module Type	SOLO-470	SOLO-480	SOLO-490	SOLO-500	SOLO-510	SOLO-520
Max Power (Pmax/W)	470	480	490	500	510	520
Voltage at Max. Power (Vmp/V)	39,4	39,7	40	40,3	40,6	40,8
Current at Max. Power (Imp/A)	11,99	12,15	12,31	12,47	12,63	12,79
Open Circuit Voltage (Voc/V)	49,8	49,8	49,9	49,9	49,9	49,9
Short Circuit Current (Isc/A)	12,73	12,86	13	13,13	13,27	13,4
Module Efficiency (%)	17,4	17,7	18,1	18,5	18,8	19,2

Specifications

Amount of cells	72
Cell type	M10 Mono PERC c-Si
Dimensions (clamping height)	2335 x 1158 x 35mm
Dimensions without mounting	2335 x 1138 x 48mm
Weight module	14,5kg
Weight module per m²	5,5kg/m²
Cable length & cross section 2 pcs	1400mm x 4mm²
Connector type	Stäubli MC4-Evo 2
By-pass devices	6 pcs in junction boxes
Country of manufacturing	The Netherlands

Operating Parameters

Operational Temperature	-40°C / +85°C
Power Output Tolerance	0~2%
Voc and Isc Tolerance	+2%
Maximum System Voltage	1500 V DC
Fire Rating	Class C

Temperature Ratings

Temperature Coefficient Isc (%/°C)	0,024
Temperature Coefficient Voc (%/°C)	-0,24
Temperature Coefficient Pmax (%/°C)	-0,36

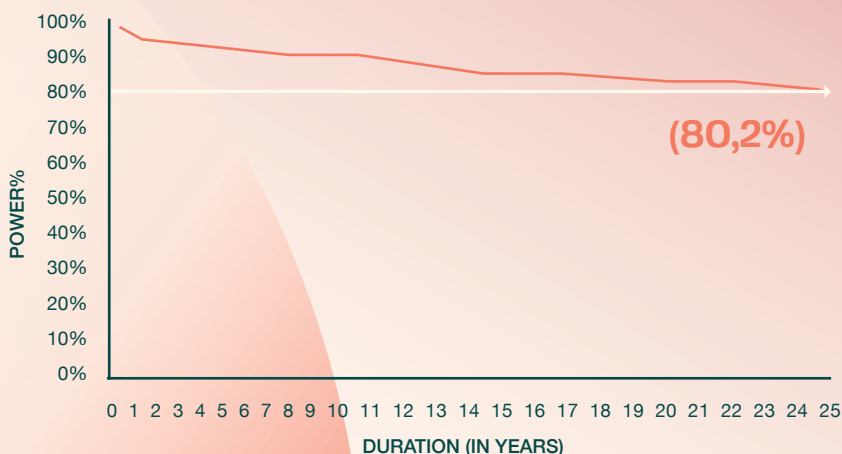
Environmental Effects

Carbon Footprint	629 to 596kg CO2 eq/kWp
Environmental Cost Indicator (NMD)	€38,48 per piece per 25 years

Mechanical loading

Front Side Max. Static Loading	2400Pa
Rear Side Max. Static Loading	2400Pa
Hailstone Test	25mm at speed 80km/h

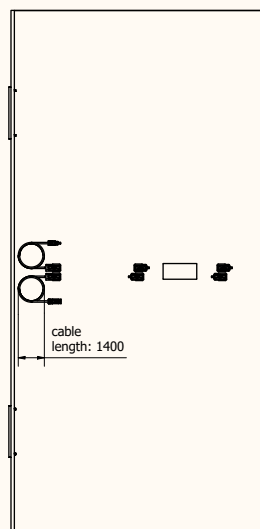
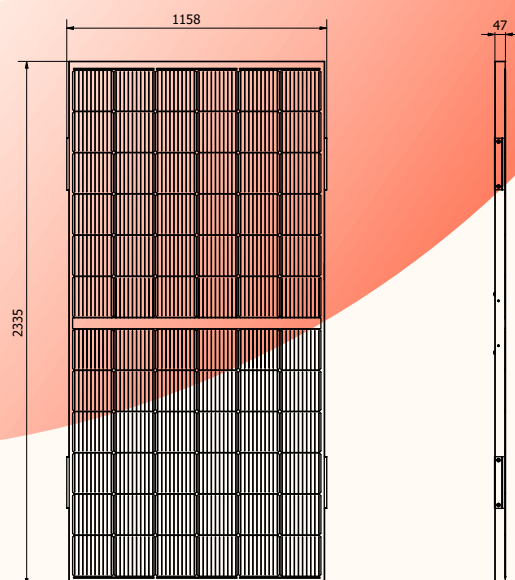
25-Year Power Warranty



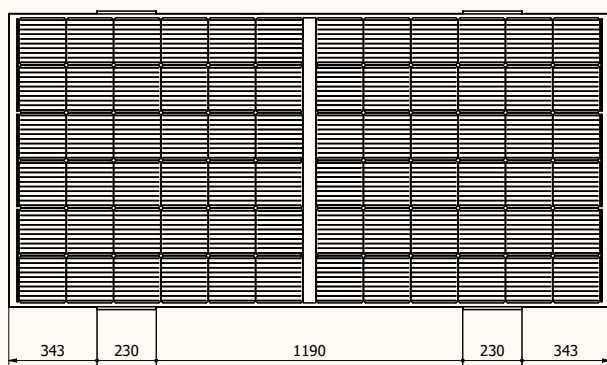


Interface clamp

Dimensions

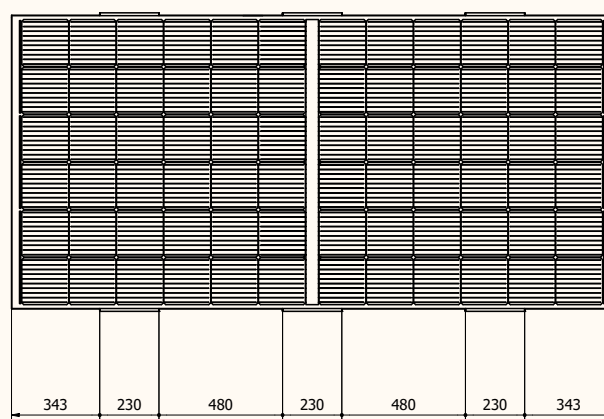


Thickness material	15mm
Clamping height	35mm
Total panel height	47mm
Max. deviation in size	+/- 2mm



Clamping positions for
4 and 6 clamp brackets.

Dimensions with 4/6 brackets



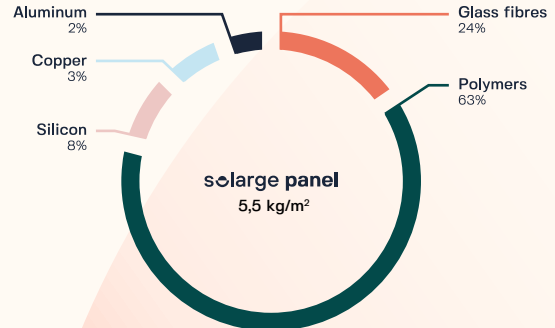


Circularity Specifications

Material Composition

Polymer	63%
Glass (fibres)	24%
Silicon* (solar cells)	8%
Copper* (wires and ribbons)	3%
Aluminum* (mounting brackets)	2%
Unknown	0%

*=critical substance



End of Life (Destination)

	SOLO
% recovered critical materials	100%
% recyclable (no downcycling)	98%
% biodegradable	0%
% reusable (brackets on the side of panels)	2%
% landfilled	0%
% incinerated	0%
Refund	€ TBD
Take back warranty	After lifespan it is guaranteed that we take back the solar panels

Source Material

	SOLO	SOLO-ULC	SOLO-BIO*	Conventional**
% primary	98%	90%	10%	100%
% recycled	2%	10%	30%	0%
% biobased / renewable	0%	0%	50%	0%
% reused	0%	0%	10%	0%

Carbon Footprint

	SOLO	SOLO-ULC	SOLO-BIO*	Conventional**
Kilogram CO ₂ -eq./kWp	592	460	366	1600

Toxicity & Health Impact

	SOLO	SOLO-ULC	SOLO-BIO*	Conventional**
No antimony	+	+	+	-
No fluoropolymers (PFAS)	+	+	+	-
No emissions at silicon refining	-	+	+	-
No lead-based soldering	-	-	+	-

*Available in 2025

**Reference values for convention glass-based solar panel [NMD_32993]



ULTRA LOW-CARBON
SOLAR ALLIANCE
Not All Solar Panels Are Created Equal

stichting
OPEN

Certisolis
TEST CERTIFICATION PHOTOVOLTAÏCS

Contact

T +31 85 239 18 00
info@solarge.com

