Roofit.Solar

Velario®

145/3x10/001

Extremely Weatherproof

Our solar roof is equipped to withstand any weather condition, including snow, ice, hail, and wind.

2-in-1 solution

Combining roof and solar panel into one product (2-in-1) reduces material and labor costs for both manufacturing and installation.

Built to last

Premium quality materials and a strong metal backsheet.

Warranty

25-year power warranty and 10-year product warranty.

Ideal for Sloped Roofs

Ideal photovoltaic solution for sloped roofs with minimum pitch of 10°.

Dreamed in Europe. Made in Europe.

We commit to the highest quality and European standards in the production and installation of our solar roofs.

Tried-and-tested

Installed using traditional well-known double-lock standing seam roofing technology.

Timeless design

Accepted by authorities for protected and heritage buildings.

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Contact Roofit Solar Energy OÜ
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Working Conditions

Maximum System Voltage	1000 V DC
Operating Temperature	-40 °C ... +85 °C
Maximum Series Fuse Rating	16A
Safety Class	Class II
Tested Positive Load	6000 Pa = 610 kg/m²
Tested Negative Load	2400 Pa
Impact Resistance	Hailstone up to 25mm in size and at the speed of 23m/s
Minimum Ventilation Below	50 mm
Minimum Roof Slope	10 degrees

Mechanical Specifications

Cells	158,75 mm monocrytalline PERC 3x10 configuration
Front glass	3.2 mm tempered low-iron glass
Back sheet	0.5 mm galvanized steel with RR33 GreenCoat Pural BT coating
Encapsulant	POE
Junction boxes	3 bypass diodes, IP68, potted
Connectors	QC4.10
Cabels	4 mm² H1Z2Z2-K solar cabel lenght 700 mm
Effective roof coverage	1698 mm x 550 mm
Mounting method	Double Seam technology
Weight	14.0 kg (pc) = 15.5 kg/m ² (installed)

Packing

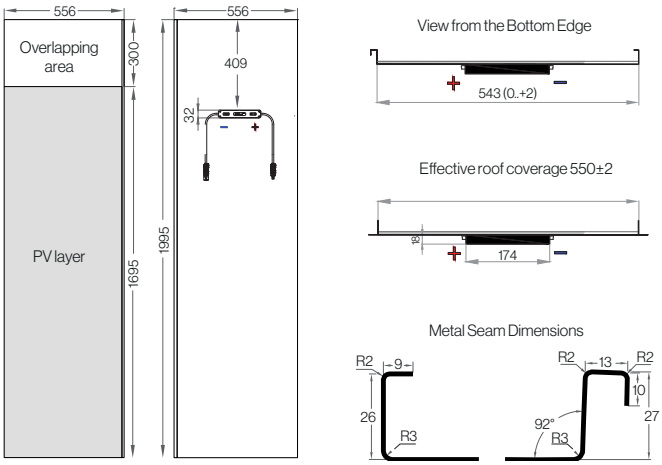
Pacaking Configuration	32 modules per pallet
Pallet (LxWxH)	2050 x 1130 x 750mm

Certification

Designed to meet the requirements of following standards:
IEC 61215-1:2016 (PV Module Reliability)
IEC 61730-1:2016 (PV Module Safety)
EN 13501-5:2016 BROOF (t2) (Fire safety)

CAUTION: READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT.

Engineering Drawings (units mm)



Electrical Characteristics

		STC [1]	NMOT [2]
Nominal Power	P_{mpp} (W)	**145**	99.2
MPP Voltage	V_{mpp} (V)	**16.5**	14.7
MPP Current	I_{mpp} (A)	**8.8**	6.75
Open Circuit Voltage	V_{OC} (V)	**20.2**	18.4
Short Circuit Current	I_{SC} (A)	**9.3**	7.19

Power Tolerances ±3 %
Current and Voltage Tolerances ±3 %

[1] Standard Test Conditions (irradiance 1000 W/m², cell temperature 25 °C, spectrum AM1.5)
[2] Nominal Module Operating Temperature (irradiance 800 W/m², air temperature 20 °C, wind 1 m/s, spectrum AM1.5)

Thermal Characteristics

Temperature Coefficient of	P_{mpp}	-0.363 % /K
Temperature Coefficient of	V_{OC}	-0.276% /K
Temperature Coefficient of	I_{SC}	0.043 % /K

Version number: 2023-2