Roofit.Solar

Velario®

145/3x10/002

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 Härgmäe
21, Tallinn 13525, Estonia
http://roofit.solar
info@roofit.solar

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	208 psf
Tested Negative Load	146 psf
Impact Resistance	HW4 - hailstone up to 1.5 in in size
Minimum Ventilation Below	1.96 in
Minimum Roof Pitch	2/12

Mechanical Specifications

Cells	6.25 in monocrytalline PERC 3x10 configuration
Front glass	0.126 in tempered low-iron glass
Back sheet	0.0196 in galvanized steel with Colorcoat Prisma coating
Encapsulant	POE
Junction boxes	3 bypass diodes, IP68, potted
Connectors	QC4.10
Cables	12 AWG H1Z2Z2-K solar cable length 27 in
Effective roof coverage	66.8 x 21.6 in
Mounting method	Double Seam technology
Weight	30.8 lbs (pc) = 3.17 lbs/ft² (installed)

Packing

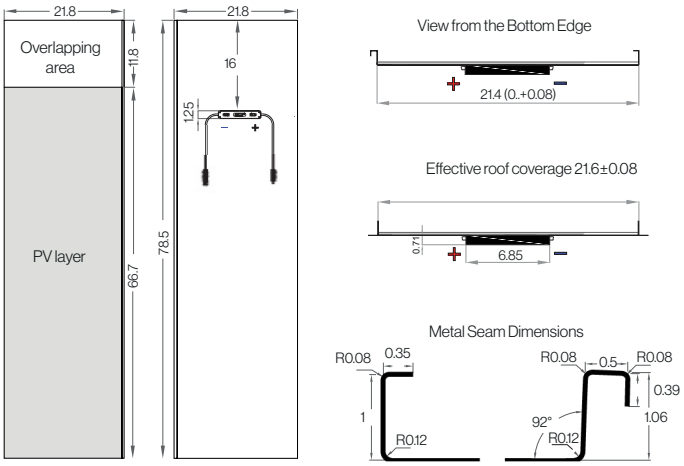
Pacaking Configuration	32 modules per pallet
Pallet (LxWxH)	80.7 x 44.5 x 30.7 in

Certification

IEC/UL/CSA 61215-1/2 (PV Module Reliability)
IEC/UL/CSA 61730-1/2 (PV Module Safety)
Fire type 34 (According to UL 61730-2/ UL 790)
Class A - IEC Roof Covering Material Fire Class Rating (According to UL 61730-2/ UL 790)
Class 60 (Accroding to UL580/UL1897)

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

Engineering Drawings (units in)

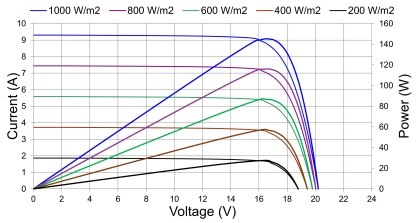


Electrical Characteristics

		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	Voc (V)	**20.2**	18. 4
Short Circuit Current	I sc (A)	**9.3**	7.19
Module efficiency	η (%)	**16.2**	

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 Coficient of	P mpp	-0.363 % /K
Temperature Coefficient of	V oc	-0.276% /K
Temperature Coefficient of	I sc	0.043 % /K