Roofit.Solar

Velario®

175/3x12/002

V2

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.

Roofit.Solar

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	10 000 Pa = 1020 kg/m^2
Tested Negative Load	7100 Pa
Impact Resistance	HW4 - hailstone up to 40 mm in size
Minimum Roof Slope	10 degrees

Mechanical Specifications

Cells	158.75 mm monocrytalline PERC 3x12 configuration
Encapsulant	POE
Front glass	3.2 mm tempered low-iron glass
Roofing material as a backsheet	0.5 mm steel 255 g/m^2 zinc-aluminium galvanized 65 µm Colorcoat Prisma RAL 9005 Gloss level 40%
Junction boxes	3 bypass diodes, IP68, potted
Connectors	QC4.10
Cabels	4 mm^2 H1Z2Z2-K solar cabel lenght 700 mm
Effective roof coverage	2020 mm x 550 mm
Mounting method	Double Seam technology
Weight	16.5 kg (pc) = 15.5 kg/m^2 (installed)

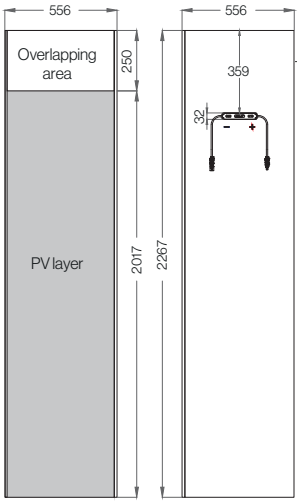
Packing

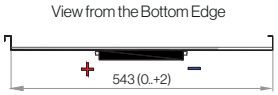
Packaging Configuration	32 modules per pallet
Pallet (LxWxH)	2320 x 1130 x 750 mm

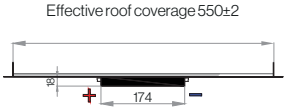
Certification

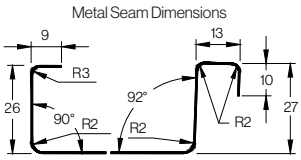
IEC 61215-1:2021 (PV Module Reliability)
IEC 61730-1:2016 (PV Module Safety)
MCS 005 (Product certification for UK market)
MCS 010 (Production control for UK market)
EN 13501-5:2016 (Fire safety)
Broof (t1) by GTC
Broof (t2) by Eurofins Expert Services Oy
Broof (t4) by Efectis

Engineering Drawings (units mm)





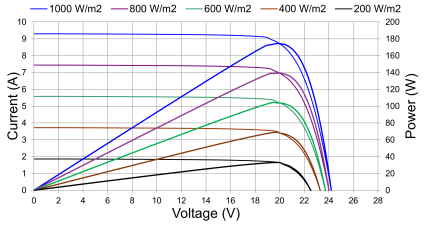




Electrical Characteristics

		STC [1]	NMOT [2]
Nominal Power	P$_{mpp}$ (W)	**175**	116.8
MPP Voltage	V$_{mpp}$ (V)	**19.8**	17.4
MPP Current	I$_{mpp}$ (A)	**8.8**	6.71
Open Circuit Voltage	V$_{oc}$ (V)	**24.2**	21.9
Short Circuit Current	I$_{sc}$ (A)	**9.3**	7.2
Module efficiency	η (%)	**16.5**	

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 Coeffcient of	P$_{mpp}$	-0.363 % /K
Temperature Coeffcient of	V$_{oc}$	-0.276% /K
Temperature Coeffcient of	I$_{sc}$	0.043 % /K

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