

Roofit.Solar

# Double Seam 2023 Solar Roof Modules

3x12/175W/RR33/B/DS

## 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](mailto: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	6000 Pa = 610 kg/m <sup>2</sup>
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 monocrystalline PERC 3x12 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 mm <sup>2</sup> 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 <sup>2</sup> (installed)

## Packing

Pacaking Configuration	32 modules per pallet
Pallet (LxWxH)	2370 x 1130 x 750 mm

## Certification

Designed to meet the requirements of following standards:

**IEC 61215-1:2016** (PV Module Reliability)

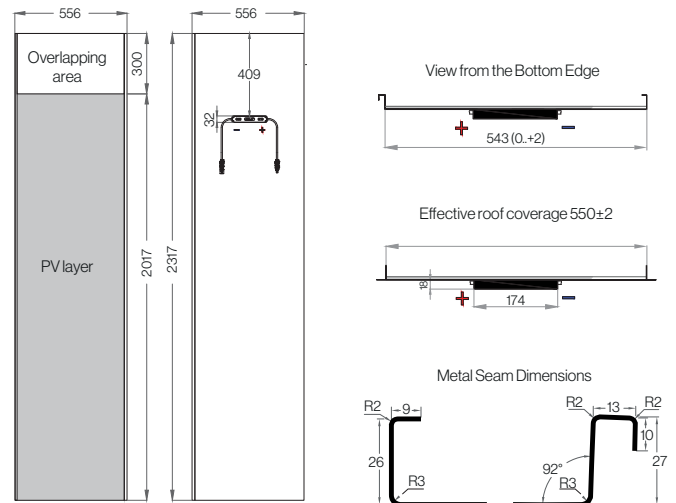
**IEC 61730-1:2016** (PV Module Safety)

**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 <sup>1</sup>	NMOT <sup>2</sup>
Nominal Power	P <sub>mpp</sub> (W)	<b>175</b>	116.8
MPP Voltage	V <sub>mpp</sub> (V)	<b>19.8</b>	17.4
MPP Current	I <sub>mpp</sub> (A)	<b>8.8</b>	6.71
Open Circuit Voltage	V <sub>OC</sub> (V)	<b>24.2</b>	21.9
Short Circuit Current	I <sub>SC</sub> (A)	<b>9.3</b>	7.2

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

<sup>1</sup> Standard Test Conditions (irradiance 1000 W/m<sup>2</sup>, cell temperature 25 °C, spectrum AM1.5)

<sup>2</sup> Nominal Module Operating Temperature (irradiance 800 W/m<sup>2</sup>, air temperature 20 °C, wind 1 m/s, spectrum AM1.5)

## Thermal Characteristics

Temperature Coefficient of	P <sub>mpp</sub>	-0.363 % / °C
Temperature Coefficient of	V <sub>OC</sub>	-0.276 % / °C
Temperature Coefficient of	I <sub>SC</sub>	0.043 % / °C