Roofit.Solar

Double Seam Solar Roof Modules

3x12/160W/RR33/B/DS

Extremely Weatherproof

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

Ideal for Sloped Roofs

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

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.

Dreamed in Europe. Made in Europe.

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

Built to last

Premium quality materials and a strong metal backsheet.

Tried-andtested

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

Warranty

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

Timeless design

Accepted by authorities for protected and heritage buildings.



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Contact Roofit Solar Energy OÜ

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http://roofit.solar info@roofit.solar

Working **Conditions**

Maximum System Voltage	1000 VDC	
Operating Temperature	-40 °C +85 °C	
Maximum Series Fuse Rating	15 A	

Thermal Characteristics

Temperature Coefficient of	P _{mpp}	γ	-0.363 % /K
Temperature Coefficient of	V _{oc}	β	-0.276%/K
Temperature Coefficient of	I _{SC}	α	0.043%/K

Electrical Characteristics

		STC1	NMOT ²
Nominal Power	P _{mpp} (W)	160	116.8
Power Tolerance	0+5 W		
MPP Voltage	V _{mpp} (V)	19.00	17.41
MPP Current	I _{mpp} (A)	8.44	6.71
Open Circuit Voltage	V _{OC} (V)	23.9	21.87
Short Circuit Current	I _{SC} (A)	9.00	7.20

Power Measurement Tolerances ±3% Other Parameter Tolerances 0...5 %

Roofit.solar modules have been tested according to the following PV standards:

IEC 61215-1:2016/IEC 61215-1-1:2016/IEC 61215-2:2016 -

Design qualification and type approval –

modules are suitable for long-term operation in general open-air climates.

IEC 61730-1:2016/IEC 61730-2:2016-

PV module safety qualification - construction requirements for PV modules to provide safe electrical and mechanical operation.

IEC 62716 - Ammonia corrosion testing IEC 61701 - Salt mist corrosion testing

Fire safety [CEN TS 1187]: EN 13501-5:2016 Broof(t2) Electrical Shock Hazard: EVS-EN IEC 61730-2:2018

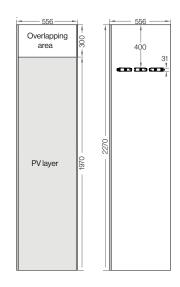
Metal parts are CE marked: EN 14782:2006

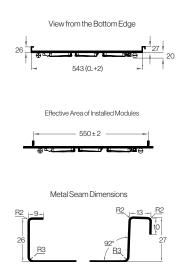






Engineering Drawings (units mm)





Mechanical **Specifications**

Cells	3 x 12 mono PERC
Junction boxes	Decentralized
	Three bypass diodes
	Protection class IP67
	PV4 connections
Effective roof coverage	1973 mm x 550 mm
Mounting method	Double Seam technology
Weight	$16.5 \text{ kg (pc)} = 15.5 \text{ kg/m}^2 \text{ (installed)}$
Front glass	3.2 mm tempered low-iron glass
Back sheet	0.5 mm metal sheet with highly durable Pural coating
Impact resistance	d = 35 mm hailstone 46 m/s = 165.5 km/h
Minimum roof slope	10 degrees
Minimum ventilation below	50 mm

 $^{^1} Standard \ Test \ Conditions \ (irradiance\ 1000\ W/m^2, cell temperature\ 25\ ^{\circ}C, spectrum\ AM1.5)$ $^2 \ Nominal \ Module\ Operating\ Temperature\ (irradiance\ 800\ W/m^2, air\ temperature\ 20\ ^{\circ}C, wind\ 1\ m/s, spectrum\ AM1.5)$