



STANDING SEAM SOLAR

FALT SOLAR by Roofit.Solar

TECHNICAL SHEET

3x10/145W/RR33/B/DS

Building integrated photovoltaic modules and metallic sheets of 0.5 mm, with highly durable PUR coating.



High mechanical load resistance



Superior linear power warranty

2in1

Roofing material and PV module

+5%

Strictly positive power tolerance



Sustainable for heritage buildings



Outstanding low light performance



Ideal solution for sloped roofs



Snail trail free structure



Patent pending technology



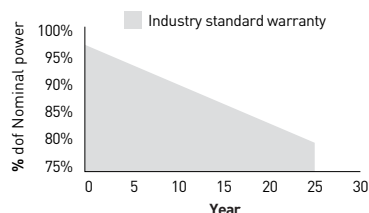
Warranty

First year 97.5% of nominal power during the first year

Linear power warranty 80% power output after 25 years

Product warranty 10 years

Linear Power Warranty



Mechanical Specifications

Cells	3 x 10 mono PERC
Junction boxes	3 bypass diodes protection class IP68 QC4 connections
Effective roof coverage	1698 mm x 550 mm
Mounting method	double seam technology
Weight	14.0 kg (pc) = 15.5 kg/m ² (installed)
Front glass	3.2 mm tempered low-iron glass
Back sheet	0.5 mm metal sheet with highly durable PUR coating
Impact resistance	d = 35 mm hailstone 46 m/s = 165.5 km/h
Minimum roof slope	10 degrees
Minimum ventilation below	50 mm

Working Conditions

Maximum System Voltage	1000 VDC
Operating Temperature	-40 °C ... +85 °C
Maximum Series Fuse Rating	16 A

Electrical Characteristics

Standard Test Conditions (irradiance 1000 W/m², cell temperature 25 °C, spectrum AM1.5)

Nominal Power	P _{mpp} (W)	145
Power Tolerance		± 3%
MPP Voltage	V _{mpp} (V)	15.8
MPP Current	I _{mpp} (A)	9.17
Open Circuit Voltage	V _{oc} (V)	19.9
Short Circuit Current	I _{sc} (A)	9.67

Normal Operating Conditions (irradiance 800 W/m², air temperature 20 °C, wind 1 m/s, spectrum AM1.5)

Power	P _{mpp} (W)	99.2
MPP Voltage	V _{mpp} (V)	14.7
MPP Current	I _{mpp} (A)	6.75
Open Circuit Voltage	V _{oc} (V)	18.4
Short Circuit Current	I _{sc} (A)	7.19

Current and voltage tolerances ±3 %

Thermal Characteristics

Normal Operating Cell Temperature	NOCT	42.1 ± 4.0 °C
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

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

IEC 61215-1:2021/IEC 61215-1-1:2021/IEC 61215-2:2021
IEC 61730-1:2016/IEC 61730-2:2016

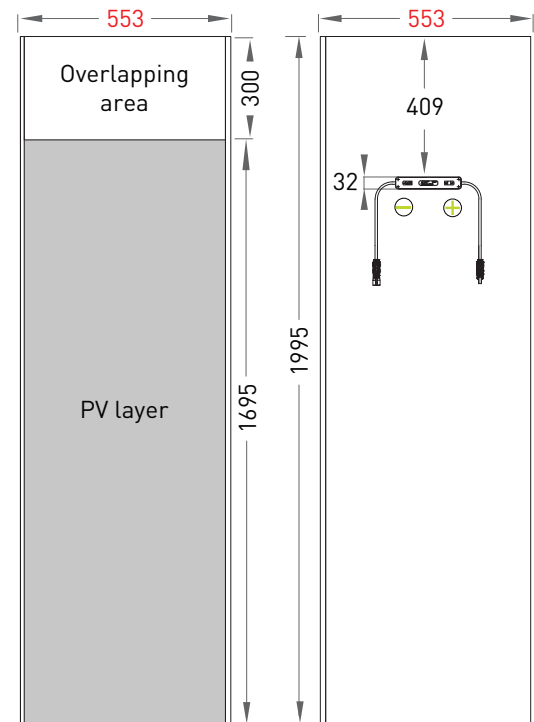
CEN TS 1187 for fire safety and comply with EN 13501-5:2016 B_{roof}(t2) classification criteria when installed.

Engineering Drawings

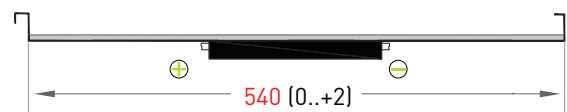
(units: mm)

View from the Front

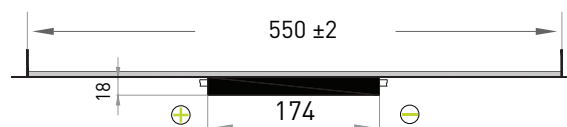
View from the Back



View from the Bottom edge



Effective Roof Coverage



Metal Seam Dimensions

