

# Roofit 3x8/110W/RR33/B/DS

Building integrated photovoltaic module



High mechanical load resistance because of metal back sheet



Snail trail free structure



Strictly positive 0...+5 % power tolerance



Superior linear power warranty  
Maximum 0.8% degradation per year



Made in EU



Outstanding low light performance



Roofing material and photovoltaic module  
2in1



Suitable for historic buildings



Ideal photovoltaic solution for sloped roofs

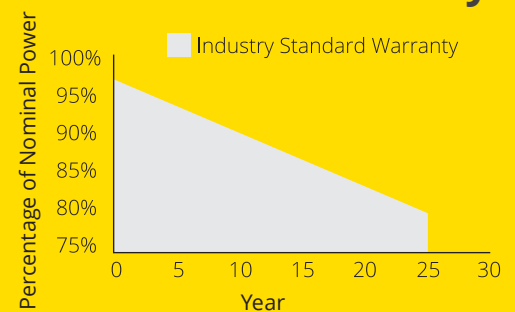


Patent pending technology

## 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 8 mono PERC
Junction boxes	decentralized three bypass diodes protection class IP67 PV4 connections
Effective roof coverage	1343 mm x 545 mm
Mounting method	double seam technology
Weight	11.0 kg
Front glass	3.2 mm temperad low-iron glass with anti-reflective technology
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	1500 VDC
Operating Temperature	-40 °C ... +85 °C
Maximum Series Fuse Rating	15 A

## Electrical Characteristics

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

Nominal Power	$P_{mpp}$ (W)	110
Power Tolerance		0...+5 %
MPP Voltage	$V_{mpp}$ (V)	12.8
MPP Current	$I_{mpp}$ (A)	8.57
Open Circuit Voltage	$V_{oc}$ (V)	15.9
Short Circuit Current	$I_{sc}$ (A)	9.11

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

Power	$P_{mpp}$ (W)	80.8
MPP Voltage	$V_{mpp}$ (V)	11.9
MPP Current	$I_{mpp}$ (A)	6.78
Open Circuit Voltage	$V_{oc}$ (V)	14.7
Short Circuit Current	$I_{sc}$ (A)	7.24

Power Measurement Tolerances  $\pm 3$  %  
Other Parameter Tolerances 0...5 %

## Thermal Characteristics

Normal Operating Cell Temperature	NOCT	45 $\pm$ 2 °C
Temperature Coefficient of $P_{mpp}$	$\gamma$	-0.39 %/°C
Temperature Coefficient of $V_{oc}$	$\beta$	-0.30 %/°C
Temperature Coefficient of $I_{sc}$	$\alpha$	0.06 %/°C

- Roofit.solar modules are tested according to **CEN TS 1187** for fire safety and comply with **EN 13501-5:2016 B<sub>roof</sub>(t2)** classification criteria when installed.

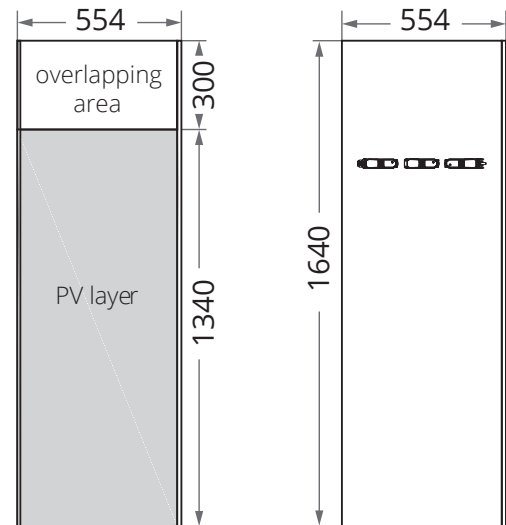
- Roofit.solar modules completed and passed **Electrical Shock Hazard Tests by Kiwa Inspecta** according to standard **EVS-EN IEC 61730-2:2018**.

- Metal parts of Roofit.solar modules are **CE** marked according to standard **EN 14782:2006**.

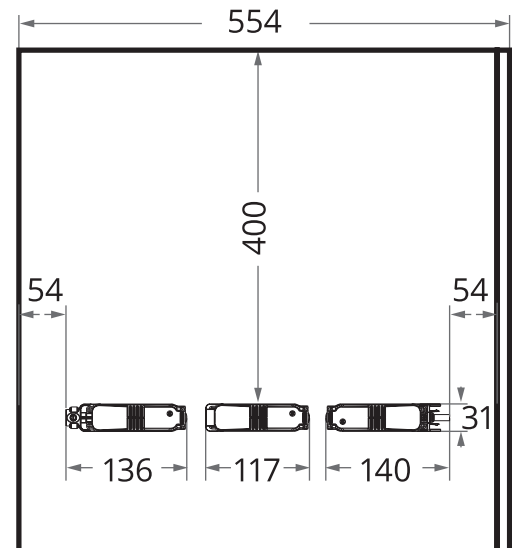
## Engineering Drawings (units mm)

View from the Front

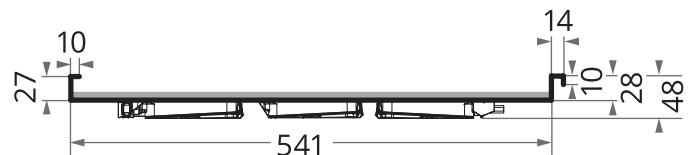
View from the Back



Junction boxes location



View from the Bottom Edge



View from the bottom edge (installed module)

