

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...+5W power tolerance



Superior linear power warranty.
Maximum 0.5 % 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

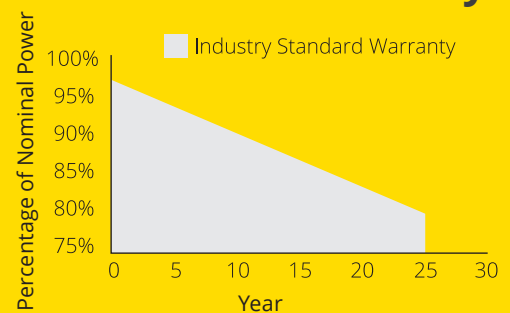


Patent pending technology

Warranty

| | |
|---------------------------------------|--|
| First year | 97.5% of nominal power during the first year |
| Linear power warranty | 80% power output after 25 years |
| Aesthetic warranty | 5 years |
| Metal sheet technical warranty | 25 years |

Linear Power Warranty



Mechanical Specifications

| | |
|--------------------------------|---|
| Cells | 3 x 8 mono PERC |
| Junction box | decentralized junction box three bypass diodes protection class IP67 MC4 connections |
| Effective roof coverage | 1340 mm x 545 mm |
| Mounting method | double seam technology |
| Weight | 11.0 kg |
| Front glass | 3.2 mm tempered 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 |
| Maximum distance between roof rafters | 1200 mm |
| Purlins | 32 mm x 100 mm max. spacing 350 mm |
| Minimum ventilation below | 50 mm |

Working Conditions

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

Electrical Characteristics

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

| | | |
|-----------------------|---------------|------|
| Nominal Power | P_{mpp} (W) | 110 |
| Power Tolerance | 0...+5 W | |
| MPP Voltage | V_{mpp} (V) | 13.4 |
| MPP Current | I_{mpp} (A) | 8.20 |
| Open Circuit Voltage | V_{oc} (V) | 17.1 |
| Short Circuit Current | I_{sc} (A) | 8.51 |

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

| | | |
|-----------------------|---------------|------|
| Power | P_{mpp} (W) | 88.0 |
| MPP Voltage | V_{mpp} (V) | 13.4 |
| MPP Current | I_{mpp} (A) | 6.56 |
| Open Circuit Voltage | V_{oc} (V) | 17.0 |
| Short Circuit Current | I_{sc} (A) | 6.83 |

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

Thermal Characteristics

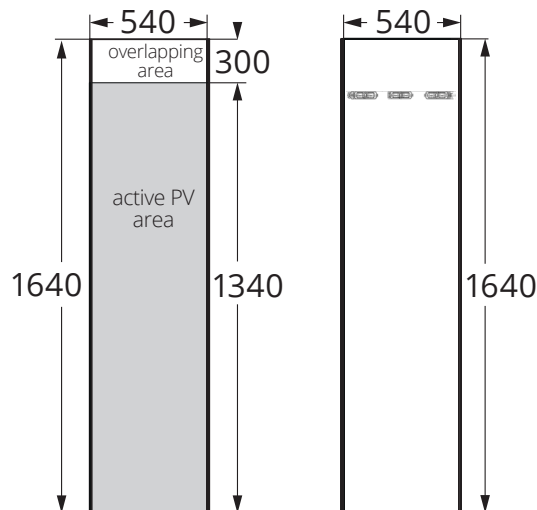
| | | |
|--------------------------------------|----------|-----------|
| Normal Operating Cell Temperature | NOCT | 45 °C |
| Temperature Coefficient of P_{mpp} | γ | -0.42 %/K |
| Temperature Coefficient of V_{oc} | β | -0.32 %/K |
| Temperature Coefficient of I_{sc} | α | 0.05 %/K |

- Roofit.solar modules are tested according to **CEN TS 1187** for fire safety and comply with **EN 13501-5:2016 B_{roof}(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**.

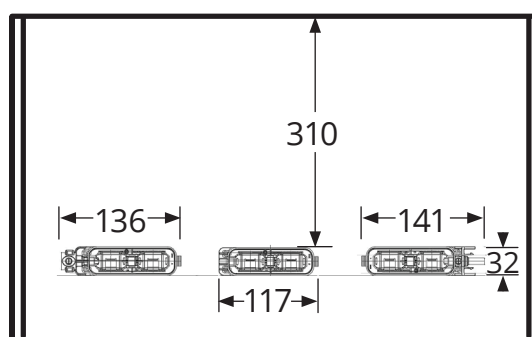
*For roofs with the slope less than 10 degrees, please contact with Roofit.solar

Engineering Drawings (units mm)

View from the Front View from the Back



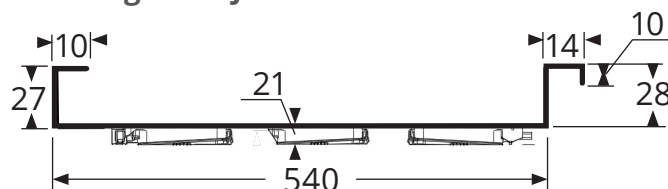
Details from the Back



View from the Top Edge



Standing Seam Joint



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Roofit.solar
Photovoltaic metal roofs