

# Velario® Slim



Dual-Function: Roof & Photovoltaics  
Designed and Developed in Europe  
Quality assured through third-party testing  
17 kg/m<sup>2</sup> - 30% less than common system  
Engineered for High Snow Load  
Tier 1 TOPCon cells



Double Seam: 100 - Year Heritage  
Exceptional Wind & Water Protection



## Certificates

**IEC 61215:2021** (PV Module Reliability)

**IEC 61730:2023** (PV Module Safety)

**MCS 005** (Product certification for UK market)

**MCS 010** (Production control for UK market)

**EN 13501-5:2016** (Fire safety)

Broof (t1) by GTC

Broof (t2) by Eurofins Expert Services Oy



reddot winner 2025  
sustainable design

2025 WINNER  
**EUROPEAN  
PRODUCT  
DESIGN  
AWARD**



Module name:

**Velario Slim**

Specification 1:

**T-2x18/180**

Specification 2:

CP/0.5/GLO/9005

HDX/0.5/GLO/9005

**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                              |
| Ambient Temperature        | -40 °C ... +40 °C                   |
| Maximum Series Fuse Rating | 25A                                 |
| Safety Class               | Class II                            |
| Tested Positive Load       | 10 000 Pa = 1020 kg/m <sup>2</sup>  |
| Tested Negative Load       | 4500 Pa                             |
| Impact Resistance          | HW4 - hailstone up to 40 mm in size |
| Minimum Roof Slope         | 10 degrees                          |

**Mechanical****Specifications**

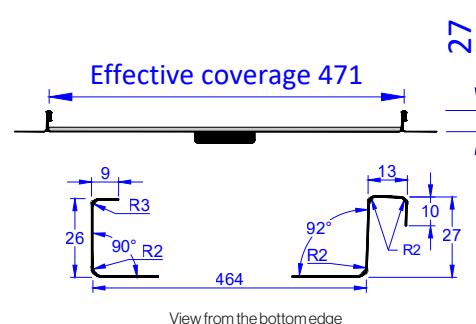
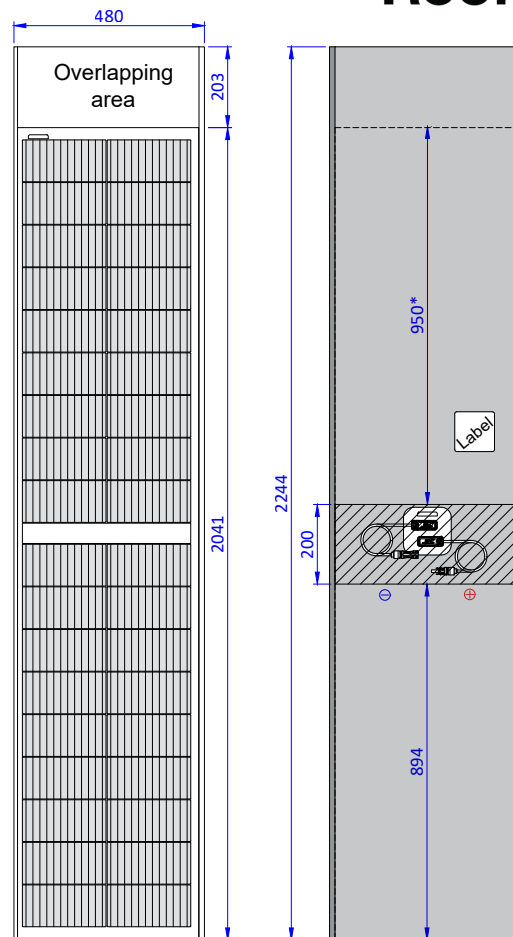
|                         |                                                                                                                               |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| Cells                   | 210 mm monocrystalline TOPCon<br>2x18 configuration                                                                           |
| Encapsulant             | POE                                                                                                                           |
| Front glass             | 3.2 mm tempered low-iron glass                                                                                                |
| Roofing material        |                                                                                                                               |
| Specification 1         | 0.5 mm steel S280GD<br>255 g/m <sup>2</sup> zinc-aluminium galvanized<br>65 µm Colorcoat Prisma RAL 9005<br>Gloss level 40 GU |
| Specification 2         | 0.5 mm steel HX220YD<br>275 g/m <sup>2</sup> zinc galvanized<br>55 µm Granite HDX RAL 9005<br>Gloss level 30 GU               |
| Junction boxes          | 2 bypass diodes, IP68, potted                                                                                                 |
| Connectors              | Stäubli MC4-Evo 2                                                                                                             |
| Cables                  | 4 mm <sup>2</sup> H1Z2Z2-K solar cable<br>length 500 mm                                                                       |
| Effective roof coverage | 2044 mm x 471 mm                                                                                                              |
| Mounting method         | Double Seam                                                                                                                   |
| Weight                  | 16.5 kg (pc) = 17.0 kg/m <sup>2</sup> (installed)                                                                             |

**Packing**

|                       |                       |
|-----------------------|-----------------------|
| Packing Configuration | 40 modules per pallet |
| Pallet (LxWxH)        | 2335 x 1105 x 840 mm  |
| Pallet weight         | 770 kg                |

**Thermal****Characteristics**

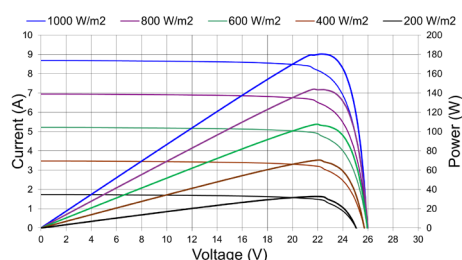
|                            |                  |            |
|----------------------------|------------------|------------|
| Temperature Coefficient of | P <sub>mpp</sub> | -0.334 %/K |
| Temperature Coefficient of | V <sub>oc</sub>  | -0.259 %/K |
| Temperature Coefficient of | I <sub>sc</sub>  | 0.049 %/K  |

**Electrical****Characteristics**

| * Standard Test Conditions (irradiance 1000 W/m <sup>2</sup> ,<br>cell temperature 25 °C, spectrum AM1.5) |                      | STC*        |
|-----------------------------------------------------------------------------------------------------------|----------------------|-------------|
| Nominal Power                                                                                             | P <sub>mpp</sub> (W) | <b>180</b>  |
| MPP Voltage                                                                                               | V <sub>mpp</sub> (V) | <b>22.8</b> |
| MPP Current                                                                                               | I <sub>mpp</sub> (A) | <b>7.9</b>  |
| Open Circuit Voltage                                                                                      | V <sub>oc</sub> (V)  | <b>26.5</b> |
| Short Circuit Current                                                                                     | I <sub>sc</sub> (A)  | <b>8.4</b>  |
| Module efficiency                                                                                         | η (%)                | <b>19.1</b> |

Power Tolerances ±3 %

Current and Voltage Tolerances ±3 %



Module name: **Velario Slim**  
 Specification 1: **T-2x12/120**  
 Specification 2: CP/0.5/GLO/9005  
 HDX/0.5/GLO/9005

## Contact

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## Workingl

### Conditions

|                            |                                     |
|----------------------------|-------------------------------------|
| Maximum System Voltage     | 1000 V                              |
| Ambient Temperature        | -40 °C ... +40 °C                   |
| Maximum Series Fuse Rating | 25A                                 |
| Safety Class               | Class II                            |
| Tested Positive Load       | 10 000 Pa = 1020 kg/m <sup>2</sup>  |
| Tested Negative Load       | 4500 Pa                             |
| Impact Resistance          | HW4 - hailstone up to 40 mm in size |
| Minimum Roof Slope         | 10 degrees                          |

## Mechanical

### Specifications

|                         |                                                                                                                               |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| Cells                   | 210 mm monocrystalline TOPCon<br>2x12 configuration                                                                           |
| Encapsulant             | POE                                                                                                                           |
| Front glass             | 3.2 mm tempered low-iron glass                                                                                                |
| Roofing material        |                                                                                                                               |
| Specification 1         | 0.5 mm steel S280GD<br>255 g/m <sup>2</sup> zinc-aluminium galvanized<br>65 µm Colorcoat Prisma RAL 9005<br>Gloss level 40 GU |
| Specification 2         | 0.5 mm steel HX220YD<br>275 g/m <sup>2</sup> zinc galvanized<br>55 µm Granite HDX RAL 9005<br>Gloss level 30 GU               |
| Junction boxes          | 2 bypass diodes, IP68, potted                                                                                                 |
| Connectors              | Stäubli MC4-Evo 2                                                                                                             |
| Cables                  | 4 mm <sup>2</sup> H1Z2Z2-K solar cable<br>length 500 mm                                                                       |
| Effective roof coverage | 1402 mm x 471 mm                                                                                                              |
| Mounting method         | Double Seam                                                                                                                   |
| Weight                  | 11.3 kg (pc) = 17.0 kg/m <sup>2</sup> (installed)                                                                             |

## Packing

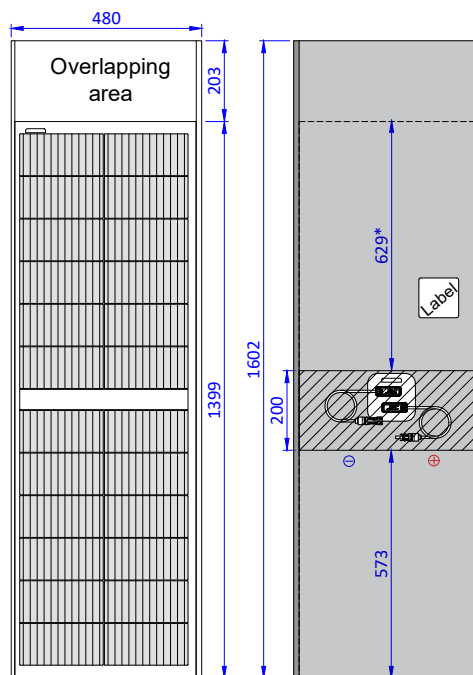
|                       |                       |
|-----------------------|-----------------------|
| Packing Configuration | 40 modules per pallet |
| Pallet (LxWxH)        | 1690 x 1105 x 840 mm  |
| Pallet weight         | 540 kg                |

## Thermal

### Characteristics

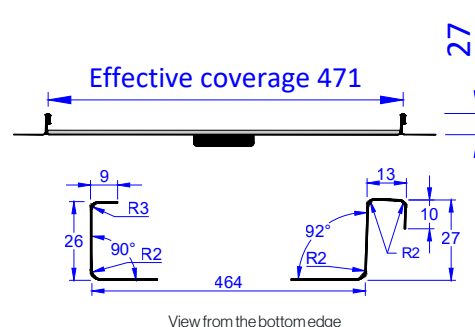
|                            |                  |             |
|----------------------------|------------------|-------------|
| Temperature Coefficient of | P <sub>mpp</sub> | -0.334 % /K |
| Temperature Coefficient of | V <sub>oc</sub>  | -0.259 % /K |
| Temperature Coefficient of | I <sub>sc</sub>  | 0.049 % /K  |

Engineering drawings (units in mm)



▨ No batten zone

\* Gap of 3 mm between 2 modules included



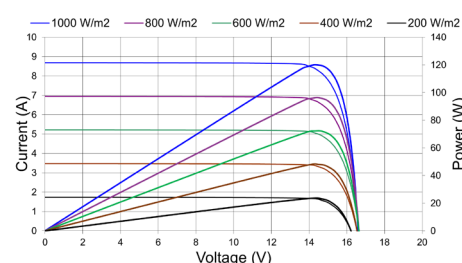
## Electrical

### Characteristics

| * Standard Test Conditions (irradiance 1000 W/m <sup>2</sup> ,<br>cell temperature 25 °C, spectrum AM1.5) |                      | STC*        |
|-----------------------------------------------------------------------------------------------------------|----------------------|-------------|
| Nominal Power                                                                                             | P <sub>mpp</sub> (W) | <b>120</b>  |
| MPP Voltage                                                                                               | V <sub>mpp</sub> (V) | <b>15.2</b> |
| MPP Current                                                                                               | I <sub>mpp</sub> (A) | <b>7.9</b>  |
| Open Circuit Voltage                                                                                      | V <sub>oc</sub> (V)  | <b>17.6</b> |
| Short Circuit Current                                                                                     | I <sub>sc</sub> (A)  | <b>8.4</b>  |
| Module efficiency                                                                                         | η (%)                | <b>18.6</b> |

Power Tolerances ±3 %

Current and Voltage Tolerances ±3 %



Module name:

**Velario Slim SG**

Specification 1:

**T-2x12/120**

Specification 2:

CP/0.5/GLO/9005/SG

HDX/0.5/GLO/9005/SG

## Contact

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## Workingl

### Conditions

|                            |                                     |
|----------------------------|-------------------------------------|
| Maximum System Voltage     | 1000 V                              |
| Ambient Temperature        | -40 °C ... +40 °C                   |
| Maximum Series Fuse Rating | 25A                                 |
| Safety Class               | Class II                            |
| Tested Positive Load       | 10 000 Pa = 1020 kg/m <sup>2</sup>  |
| Tested Negative Load       | 4500 Pa                             |
| Impact Resistance          | HW4 - hailstone up to 40 mm in size |
| Minimum Roof Slope         | 10 degrees                          |

## Mechanical

### Specifications

|                         |                                                                                                                               |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| Cells                   | 210 mm monocrystalline TOPCon<br>2x12 configuration                                                                           |
| Encapsulant             | POE                                                                                                                           |
| Front glass             | 3.2 mm tempered low-iron glass                                                                                                |
| Roofing material        |                                                                                                                               |
| Specification 1         | 0.5 mm steel S280GD<br>255 g/m <sup>2</sup> zinc-aluminium galvanized<br>65 µm Colorcoat Prisma RAL 9005<br>Gloss level 40 GU |
| Specification 2         | 0.5 mm steel HX220YD<br>275 g/m <sup>2</sup> zinc galvanized<br>55 µm Granite HDX RAL 9005<br>Gloss level 30 GU               |
| Junction boxes          | 2 bypass diodes, IP68, potted                                                                                                 |
| Connectors              | Stäubli MC4-Evo 2                                                                                                             |
| Cables                  | 4 mm <sup>2</sup> H1Z2Z2-K solar cable<br>length 500 mm                                                                       |
| Effective roof coverage | 2019 mm x 471 mm                                                                                                              |
| Mounting method         | Double Seam                                                                                                                   |
| Weight                  | 13.5 kg (pc) = 14.2 kg/m <sup>2</sup> (installed)                                                                             |

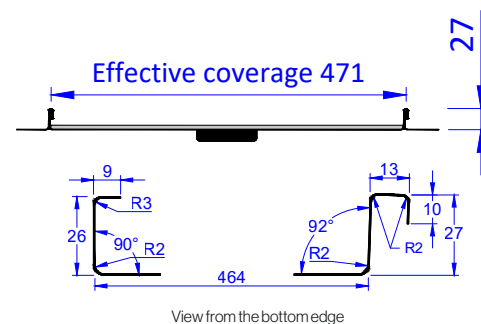
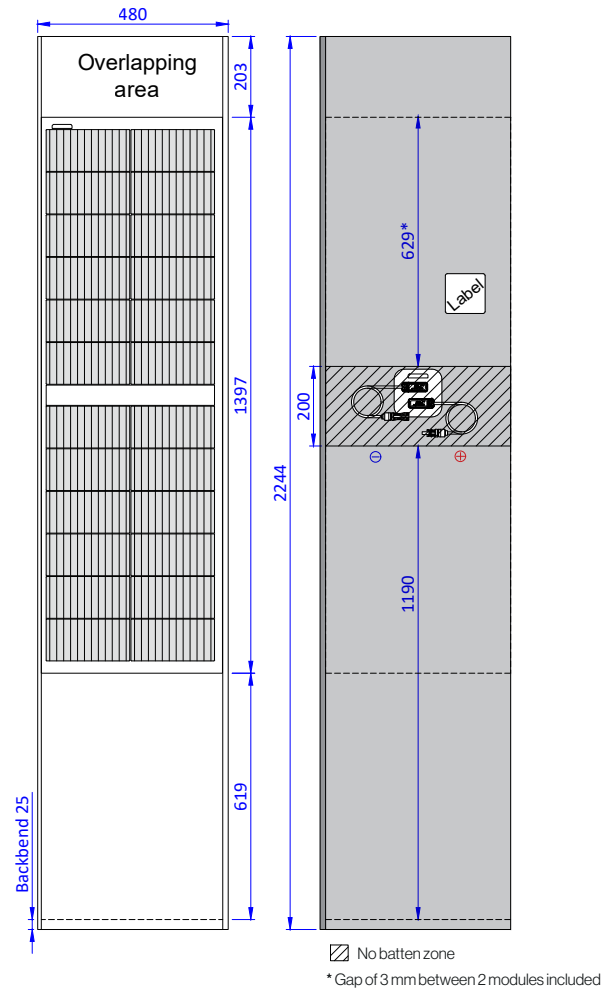
## Packing

|                       |                       |
|-----------------------|-----------------------|
| Packing Configuration | 40 modules per pallet |
| Pallet (LxWxH)        | 2335 x 1105 x 840 mm  |
| Pallet weight         | 650 kg                |

## Thermal

### Characteristics

|                            |                  |             |
|----------------------------|------------------|-------------|
| Temperature Coefficient of | P <sub>mpp</sub> | -0.334 % /K |
| Temperature Coefficient of | V <sub>oc</sub>  | -0.259 % /K |
| Temperature Coefficient of | I <sub>sc</sub>  | 0.049 % /K  |



## Electrical

### Characteristics

| * Standard Test Conditions (irradiance 1000 W/m <sup>2</sup> ,<br>cell temperature 25 °C, spectrum AM1.5) |                      | STC* |
|-----------------------------------------------------------------------------------------------------------|----------------------|------|
| Nominal Power                                                                                             | P <sub>mpp</sub> (W) | 120  |
| MPP Voltage                                                                                               | V <sub>mpp</sub> (V) | 15.2 |
| MPP Current                                                                                               | I <sub>mpp</sub> (A) | 7.9  |
| Open Circuit Voltage                                                                                      | V <sub>oc</sub> (V)  | 17.6 |
| Short Circuit Current                                                                                     | I <sub>sc</sub> (A)  | 8.4  |
| Module efficiency                                                                                         | η (%)                | 18.6 |

Power Tolerances ±3 %

Current and Voltage Tolerances ±3 %

