

# Photovoltaic Modules

## Sovello Project Pro P Series

Made in Ontario

Sovello Project Pro modules bring the best of both worlds to Canadian PV solar projects -- German experience in producing high-quality modules and Canadian manufacturing standards. Our highly efficient solar modules meet Ontario content regulations.

Sovello is one of the largest, fully integrated module manufacturers in the world. We have produced millions of modules, all backed by rigorous German engineering standards. We are pleased to bring our experience to Ontario by distributing modules exclusively through AS Solar Inc.

- › Positive output tolerance with at least 100% guaranteed nominal output
- › Maximum performance with a 5-year guarantee on workmanship and on 90% of the output after 10 years and 80% after 25 years
- › Embedded manufacturer label for easy identification of the installed modules
- › High efficient polycrystalline solar cells
- › High mechanical stability with torsion-resistant, hollow-chamber module frames



## Electrical Nominal Values

### Standard Test Conditions (STC)<sup>1</sup>

|                            |   | SV-P-225 | SV-P-230 | SV-P-235 | SV-P-240 |
|----------------------------|---|----------|----------|----------|----------|
| Nominal Power <sup>2</sup> | W | 225      | 230      | 235      | 240      |
| Output Tolerance           | % | 0/+5     | 0/+5     | 0/+5     | 0/+5     |
| P <sub>mpp, max.</sub>     | W | 229,9    | 234,9    | 239,9    | 244,9    |
| P <sub>mpp, min.</sub>     | W | 225,0    | 230,0    | 235,0    | 240,0    |
| Module Efficiency          | % | 13,62    | 13,92    | 14,23    | 14,53    |
| U <sub>mpp</sub>           | V | 29,9     | 30,0     | 30,1     | 30,2     |
| I <sub>mpp</sub>           | A | 7,53     | 7,67     | 7,81     | 7,95     |
| U <sub>oc</sub>            | V | 36,7     | 36,8     | 36,8     | 37,0     |
| I <sub>sc</sub>            | A | 8,18     | 8,34     | 8,44     | 8,54     |

### Nominal Operating Cells Temperature Conditions (NOCT)<sup>3</sup>

| T NOCT | °C | 45 ± 2 | 45,2 ± 2 | 45,2 ± 2 | 45,2 ± 2 |
|--------|----|--------|----------|----------|----------|
|--------|----|--------|----------|----------|----------|

<sup>1</sup> STC: 1,000 W/m<sup>2</sup> irradiance on module level, module temperature 25 °C and spectral distribution of irradiance acc. to Air Mass 1.5

<sup>2</sup> Power rating at standard test conditions (STC)

<sup>3</sup> NOCT: Equilibrium temperature at 800 W/m<sup>2</sup> irradiance on module level, air temperature 20 °C, wind velocity 1 m/s

### Temperature Coefficients

|                           |        |        |
|---------------------------|--------|--------|
| $\gamma$ P <sub>mpp</sub> | (%/°C) | - 0,45 |
| $\beta$ U <sub>oc</sub>   | (%/°C) | - 0,32 |
| $\alpha$ I <sub>sc</sub>  | (%/°C) | + 0,04 |

### System Design

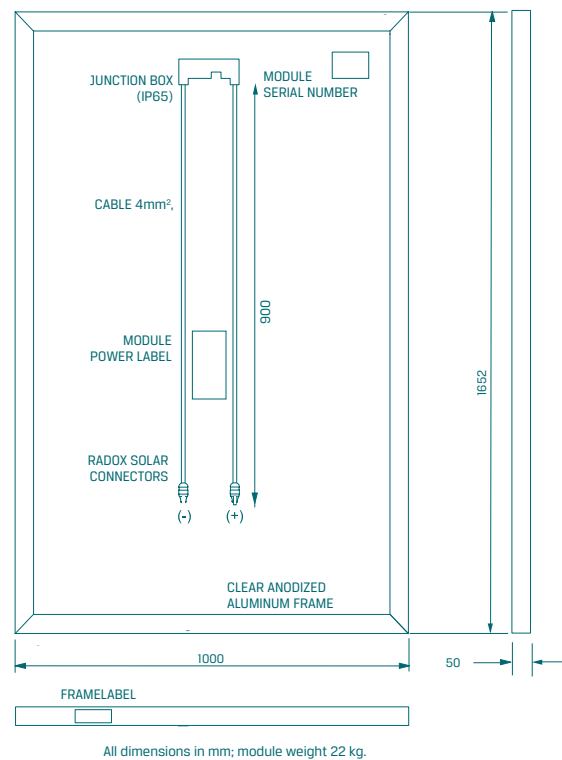
|                             |                   |
|-----------------------------|-------------------|
| Maximum countercurrent flow | 30 A              |
| Maximum system voltage      | (IEC/UL) 1000/600 |

### Mechanical Stability

High level of guaranteed durability in wind and snow up to 5.4 kN/m<sup>2</sup>.

 ELECTRICAL EQUIPMENT  
CHECK WITH YOUR INSTALLER

## Mechanical Specifications



This product was manufactured in Ontario by Sovello Canada's subcontractor and uses the following materials: 60 polycrystalline, 6 inch, 3 busbar solar cells, tempered solar glass, EVA encapsulant, polymer back-skin and a double walled, anodized aluminium frame. For more information on the approved installation and use of this product, please contact Sovello Canada. Module distribution outside of Canada prohibited.

Please note this product sheet is preliminary and its specification are subject to change without prior notice. No legal claims may be made based on this product data sheet. Sovello assumes no liability with regard to the use of the information found here or the consequences thereof.

### Partners

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