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# **EnergyPal**

## **Solar Panel Guide Specification Data Sheet**

**Pro Regenerative Energies Stuttgart GmbH & Co.  
KG**

**GOP-E-M100Wp**

**GOP-E-M100Wp**

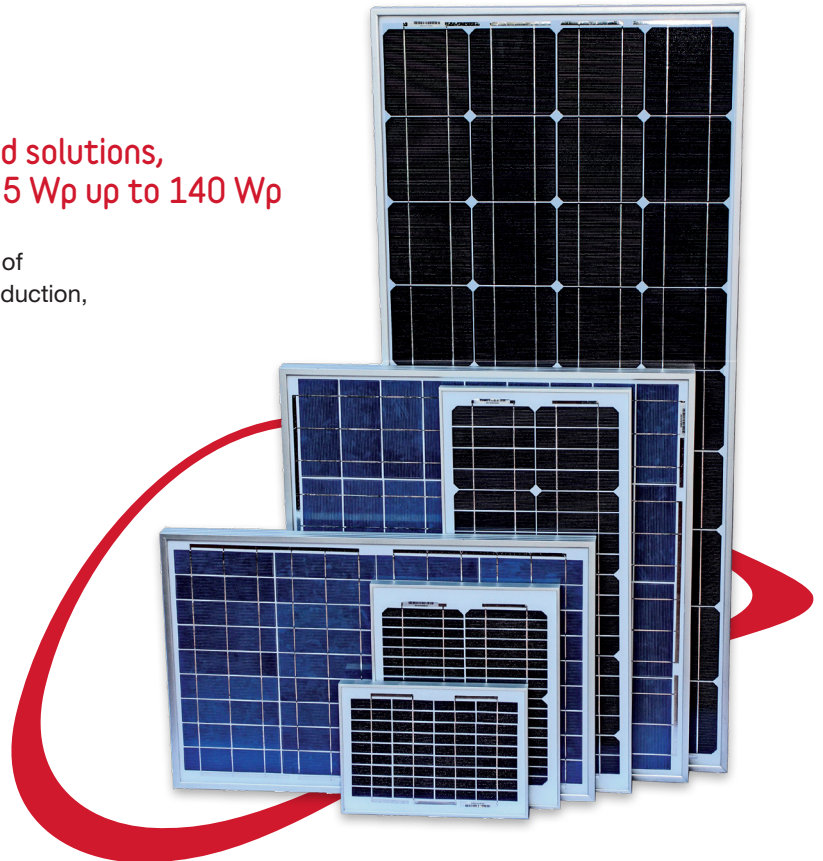
Also available on the web at  
[EnergyPal.com/pro-regenerative-energies-stuttgart-gmbh-co-kg-solar-panels/gop-e-m100wp](http://EnergyPal.com/pro-regenerative-energies-stuttgart-gmbh-co-kg-solar-panels/gop-e-m100wp)

# PV Modules

German off-grid power modules for off-grid solutions, mono- and poly-crystalline, in the range of 5 Wp up to 140 Wp

GOP high quality PV modules are a perfect synthesis out of German engineering, high qualified and cost effective production, high-end components and quality assurance.

- High performance off-grid PV modules
- Special manufactured for off-grid applications
- Outstanding price performance ratio
- Especially for off-grid applications in industrial field for example traffic: street lightning, traffic guidance systems, parking ticket machines etc.
- For off-grid solutions such as holiday houses, country cottages, garden houses, hunting lodges, mobile homes, caravans, sailing ships, solar pumps etc.
- with junction box for cables +/-
- Protection class: 5-20 Wp: IP 54, 50-140 Wp: IP 65
- 2 years product guarantee
- 5 years guarantee for 90% rated power
- 10 years guarantee for 80% rated power
- Plus tolerance (5/10/20/50/140 Wp): up to +4,85 Wp



| Type                       | Dimensions | Weight          | Specifications           |                                  |                                  |                                   |                                    |      |
|----------------------------|------------|-----------------|--------------------------|----------------------------------|----------------------------------|-----------------------------------|------------------------------------|------|
|                            |            |                 | Max. power ( $P_{max}$ ) | Max. power voltage ( $U_{mpp}$ ) | Max. power current ( $I_{mpp}$ ) | Open circuit voltage ( $U_{oc}$ ) | Short circuit current ( $I_{sc}$ ) |      |
| PV modules 36 cells        | mm         | kg              | Wp                       | V                                | A                                | V                                 | A                                  |      |
| GOP-J-M5Wp* <sup>1</sup>   | mono       | 293 x 212 x 35  | 1,2                      | 5                                | 17,82                            | 0,29                              | 21,5                               | 0,32 |
| GOP-J-M10Wp* <sup>1</sup>  | mono       | 353 x 293 x 35  | 1,5                      | 10                               | 17,82                            | 0,57                              | 21,5                               | 0,63 |
| GOP-J-M20Wp* <sup>1</sup>  | mono       | 652 x 287 x 35  | 3,0                      | 20                               | 17,82                            | 1,14                              | 21,6                               | 1,27 |
| GOP-J-P50Wp* <sup>4</sup>  | poly       | 665 x 535 x 35  | 5,5                      | 50                               | 17,40                            | 2,87                              | 22,0                               | 3,16 |
| GOP-S-M80Wp <sup>2</sup>   | mono       | 670 x 770 x 30  | 6,0                      | 80                               | 17,8                             | 4,49                              | 22,3                               | 4,85 |
| GOP-S-M85Wp <sup>2</sup>   | mono       | 670 x 770 x 30  | 6,0                      | 85                               | 17,8                             | 4,78                              | 22,3                               | 5,16 |
| GOP-E-M100Wp* <sup>3</sup> | mono       | 1190 x 540 x 35 | 7,6                      | 100                              | 18,0                             | 5,55                              | 22,19                              | 5,97 |
| GOP-J-P140Wp* <sup>4</sup> | poly       | 1482 x 676 x 35 | 11,5                     | 140                              | 18,10                            | 7,73                              | 22,2                               | 8,31 |

Maximum system voltage: <sup>2/3</sup> 1000 VDC, <sup>1/4</sup> 800 VDC

Temperature Coefficients: monocrystalline modules: <sup>1</sup>  $P_{max}$  -0,49%/°C,  $U_{oc}$  -0,35%/°C,  $I_{sc}$  0,05%/°C; polycrystalline modules: <sup>4</sup>  $P_{max}$  -0,45%/°C,  $U_{oc}$  -0,32%/°C,  $I_{sc}$  0,05%/°C;

<sup>2</sup>  $P_{max}$  -0,48%/°C,  $U_{oc}$  -0,34%/°C,  $I_{sc}$  0,017%/°C; <sup>3</sup>  $P_{max}$  -0,47%/°C,  $U_{oc}$  -0,346%/°C,  $I_{sc}$  0,036%/°C;

Specifications as per STC: irradiance 1000 W/m<sup>2</sup>, module temperature 25 °C, AM 1,5

\*available in stock Germany

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