

# MEP630-T132-GG



## N-Type TOPCon-132cell-G12R Dual Glass

**0~+5W**  
Positive Power Tolerance

**23.3 %**  
Maximum Efficiency

**605-630W**

**10-30% Additional Power Generation**  
30 years lifespan brings 10-30% additional power generation

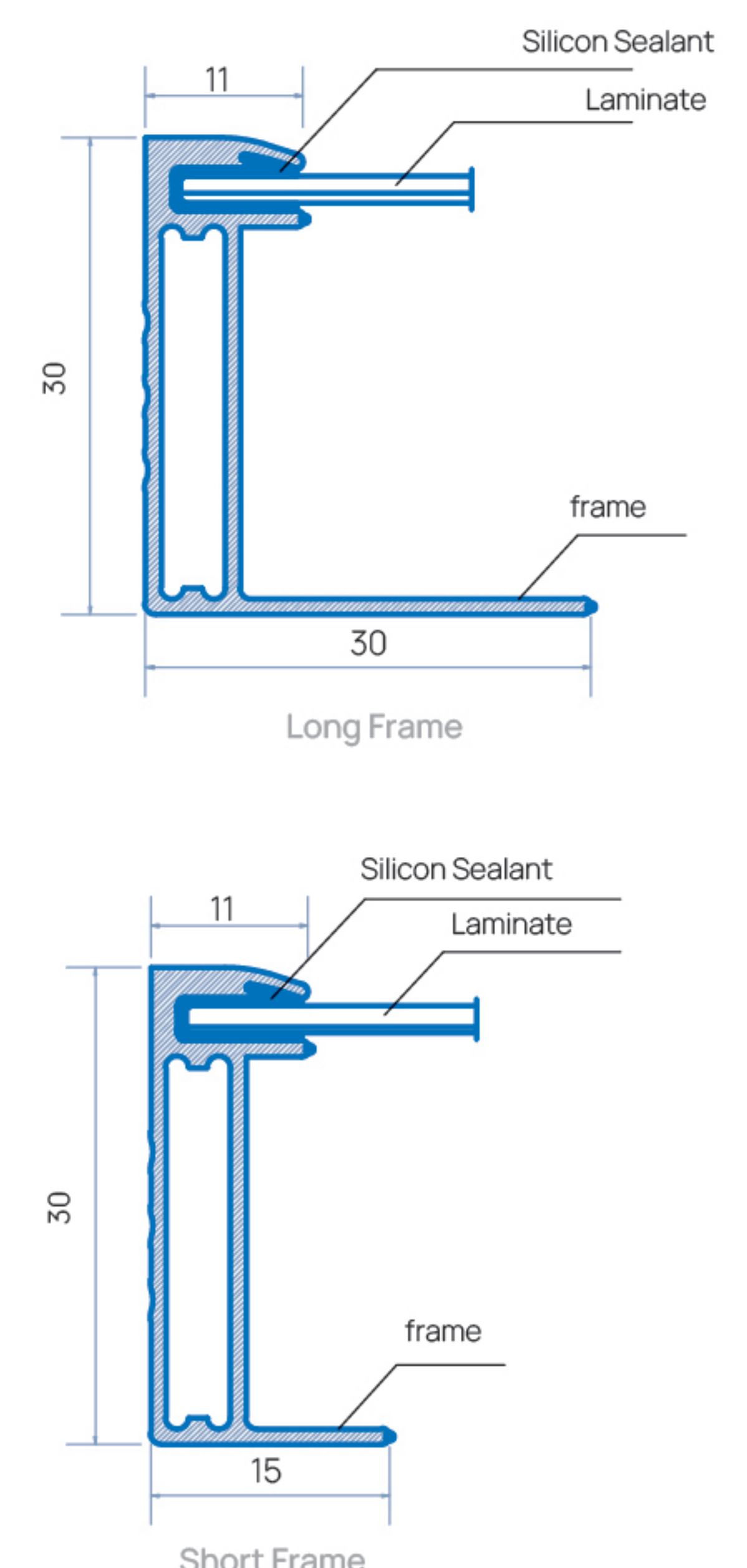
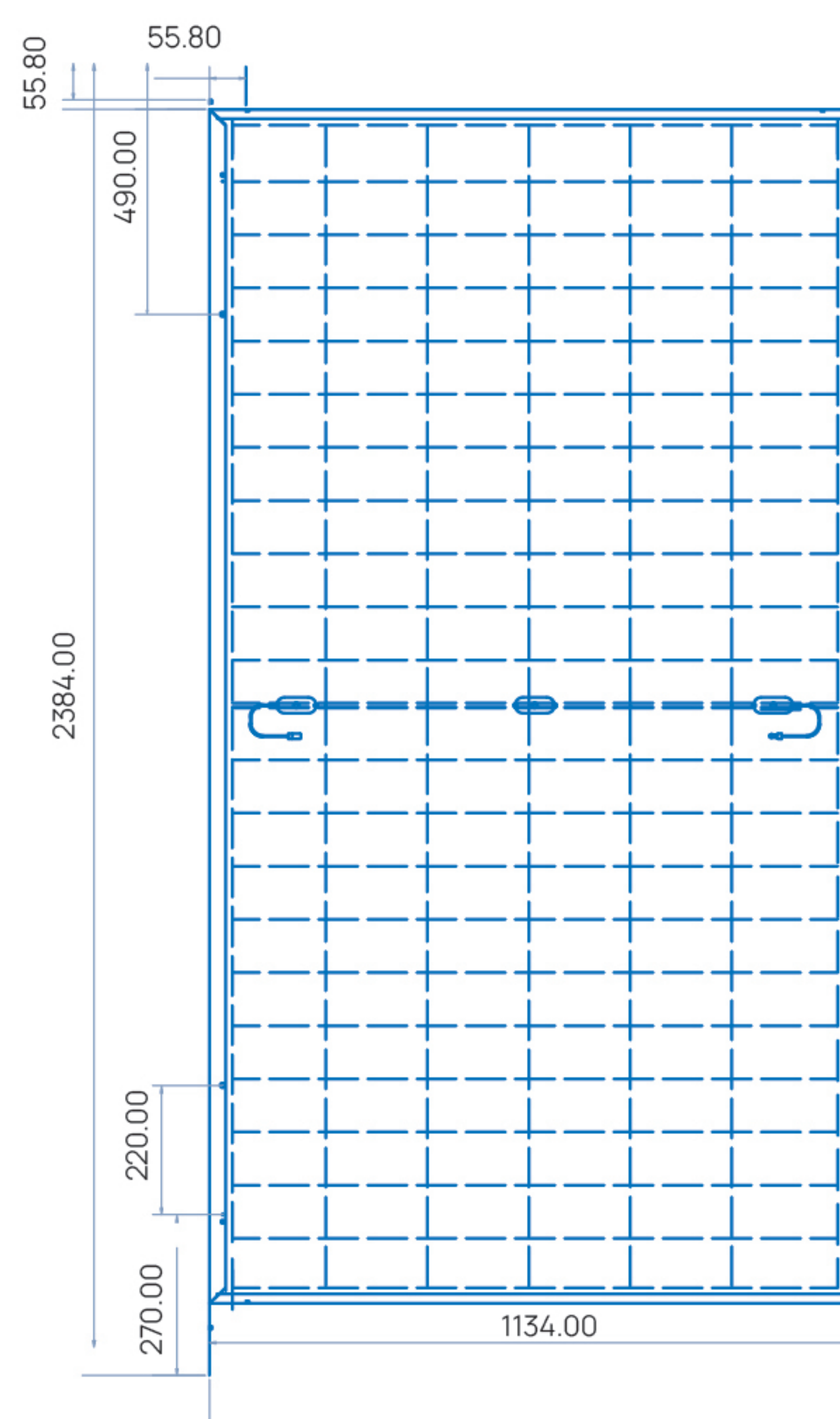
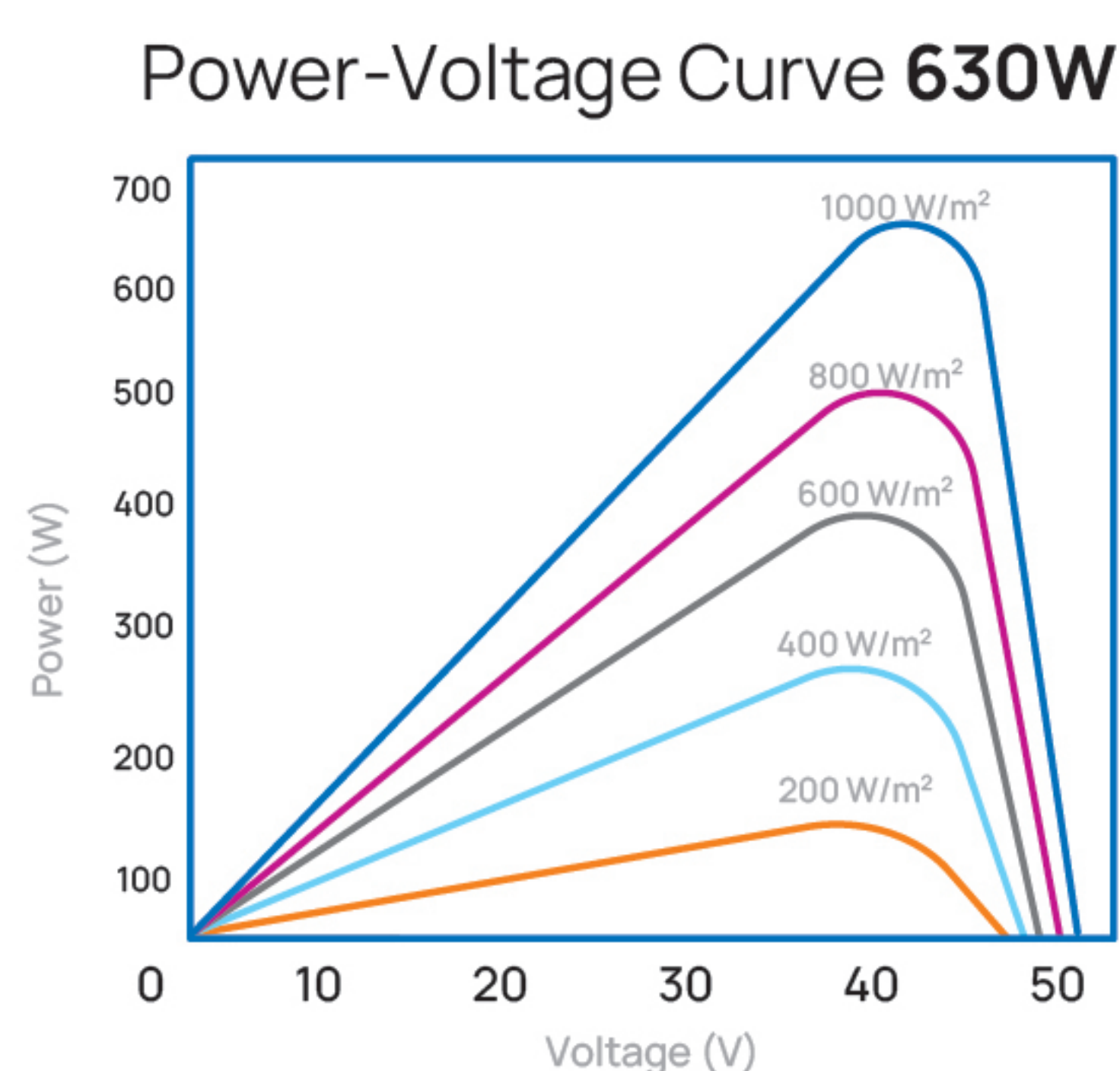
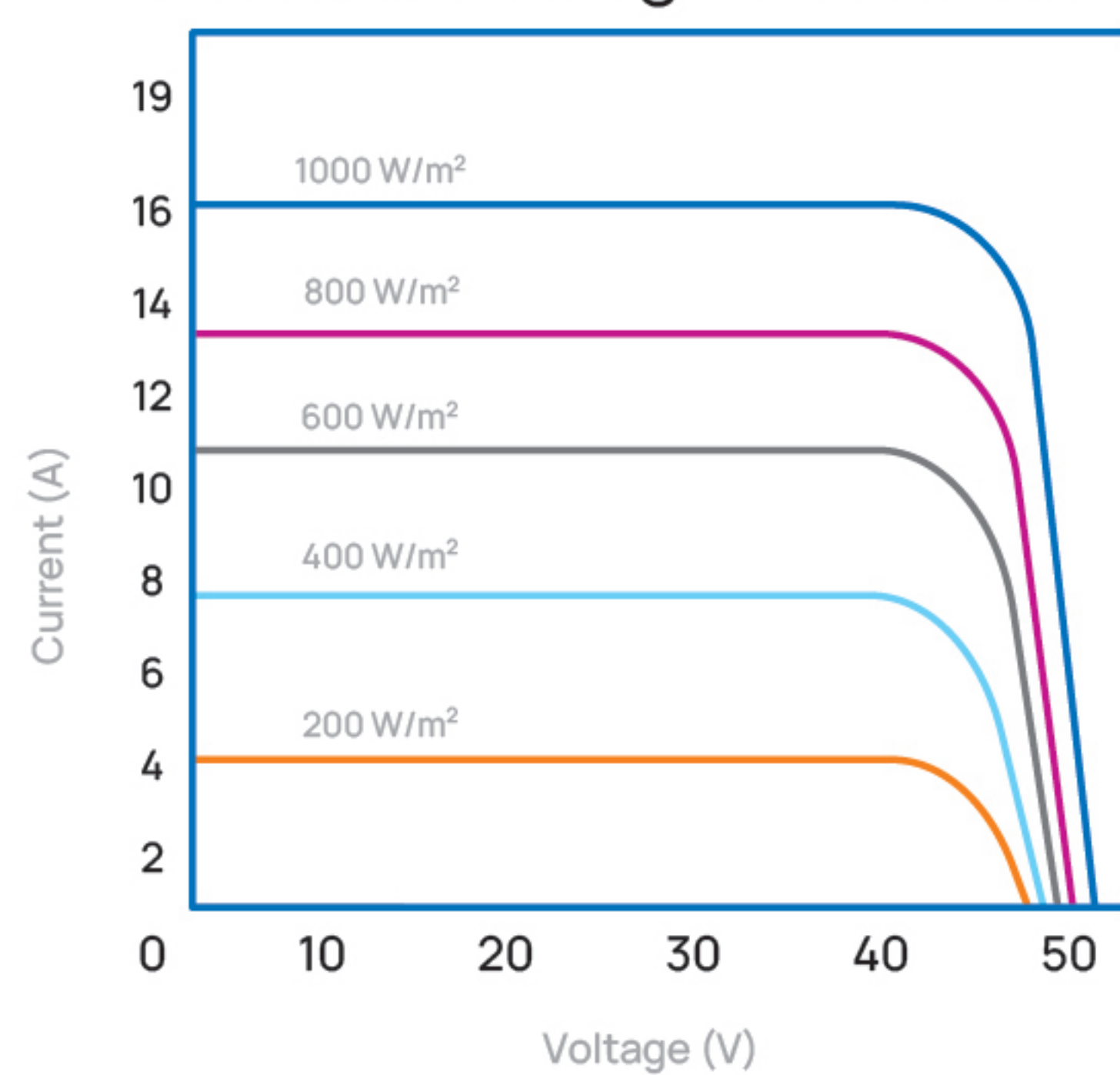
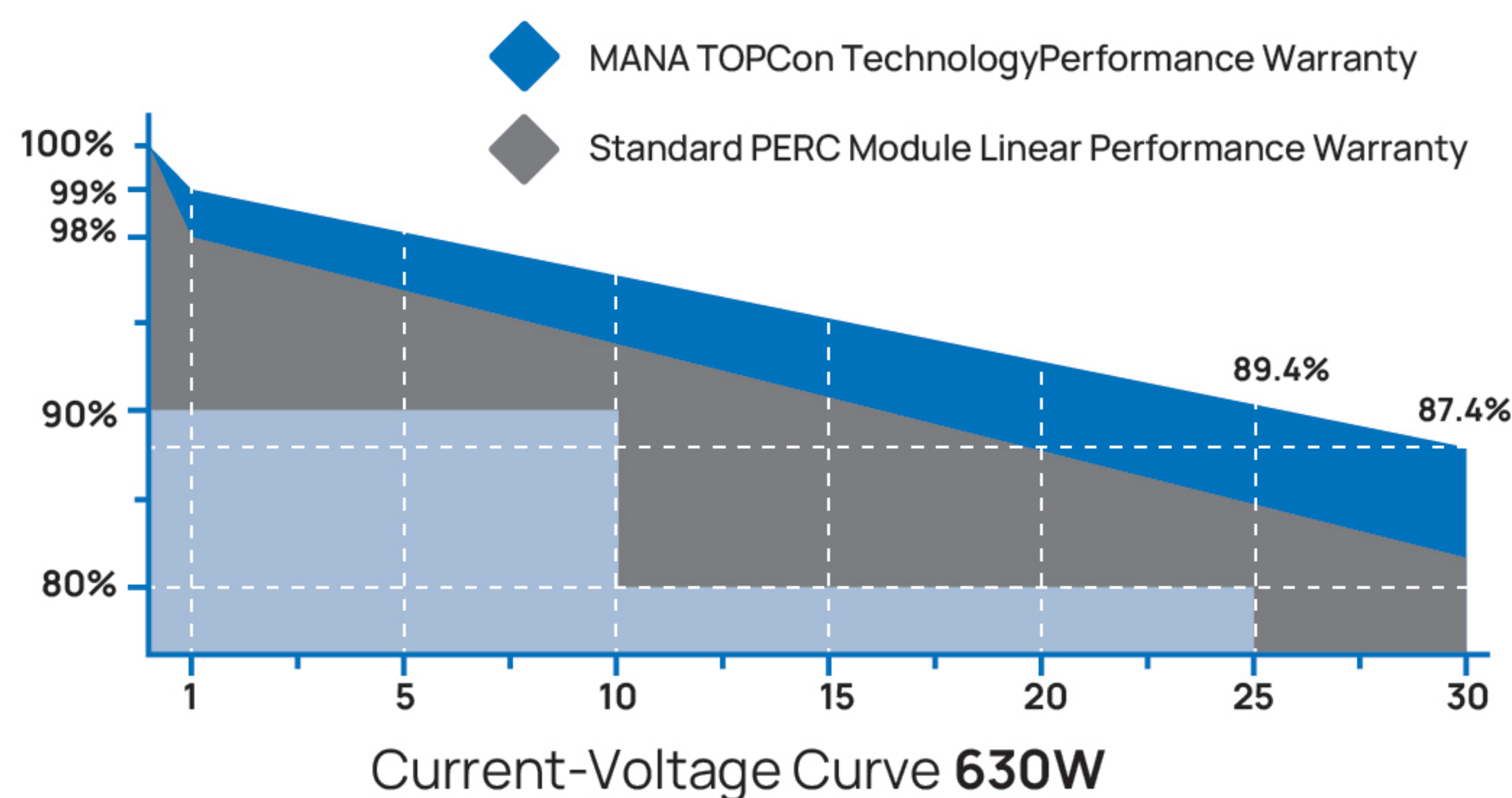
**Zero LID**  
N-type solar cell has no LID naturally which can increase power generation

**Lower LCOE**  
Up to 25% more power generation in bifacial type (depending on Albedo)

**Better Weak Light Performance**  
Higher power output even under low-light environment like on cloudy or foggy days

**Lower Temperature Coefficient**  
Better performance of the solar panel in higher temperature environment or hot days

**More Weather Resistance**  
Resistant to harsh environment such as salt, ammonia, sand, high temperature and high humidity



### Mana Energy's Certificates

TUV Certificate IEC 61215: 2021  
TUV Certificate IEC 61730: 2016  
TUV Certificate IEC 61730: 2023  
CE Certification (EN 61730:2018)  
UKCA Certification (EN 61730:2018)  
CEBEC Certification (IEC 61215: 2021 / IEC 61730: 2023)  
ISO 9001:2015: Quality management system  
ISO 14001:2015: Environmental management system  
ISO 45001:2018: Occupational health and safety management system



**30**  
YEARS

**Performance**  
Warranty

**12**  
YEARS

**Product**  
Warranty

### Caution

To operate, install and manage Mana Energy Modules, read the installation manual and use carefully.

### Observation

This datasheet is subject to change without notice due to continuous improvement of our products. You can find all records of the updates on our website [www.manaenergypak.com](http://www.manaenergypak.com) or by contacting one of our sales staff. Allrights reserved @Mana Energy.





# MEP630-T132R-GG

| Electrical Specification (STC) - Front Side |     |     | STC: AM1.5 1000W/m <sup>2</sup> 25°C [Test Uncertainty: ±3%] |                     |                     |                     |                     |                     |
|---------------------------------------------|-----|-----|--------------------------------------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Model                                       |     |     | MEP 630-T132-GG 605                                          | MEP 630-T132-GG 610 | MEP 630-T132-GG 615 | MEP 630-T132-GG 620 | MEP 630-T132-GG 625 | MEP 630-T132-GG 630 |
| Max Power                                   | Pmp | [W] | 605                                                          | 610                 | 615                 | 620                 | 625                 | 630                 |
| Max Power Voltage                           | Vmp | [V] | 39.67                                                        | 39.88               | 40.07               | 40.34               | 40.56               | 40.78               |
| Max Power Current                           | Imp | [A] | 15.27                                                        | 15.31               | 15.37               | 15.39               | 15.43               | 15.46               |
| Open Circuit Voltage                        | Voc | [V] | 47.95                                                        | 48.15               | 48.36               | 48.56               | 48.75               | 48.95               |
| Short Circuit Current                       | Isc | [A] | 16.06                                                        | 16.12               | 16.18               | 16.24               | 16.30               | 16.36               |
| Efficiency                                  |     | [%] | 22.4                                                         | 22.6                | 22.7                | 22.9                | 23.1                | 23.3                |

| Electrical Specification (NMOT) - Front Side |     |     | NMOT: 800W/m <sup>2</sup> 20°C Wind: 1m/s [Test Uncertainty: ±3%] |       |       |       |       |       |
|----------------------------------------------|-----|-----|-------------------------------------------------------------------|-------|-------|-------|-------|-------|
| Max Power                                    | Pmp | [W] | 462                                                               | 465   | 469   | 473   | 477   | 481   |
| Max Power Voltage                            | Vmp | [V] | 37.44                                                             | 37.61 | 37.80 | 37.91 | 38.09 | 38.30 |
| Max Power Current                            | Imp | [A] | 13.34                                                             | 12.37 | 12.43 | 12.48 | 12.53 | 12.57 |
| Open Circuit Voltage                         | Voc | [V] | 45.51                                                             | 45.72 | 45.91 | 46.09 | 46.29 | 46.48 |
| Short Circuit Current                        | Isc | [A] | 12.97                                                             | 13.01 | 13.06 | 13.11 | 13.16 | 13.21 |

| Bifaciality Power Generation Gain (Regarding 610W as an example) |     |     |       |       |       |       |       |       |
|------------------------------------------------------------------|-----|-----|-------|-------|-------|-------|-------|-------|
| Power Gain                                                       |     | [%] | 0     | 5     | 10    | 15    | 20    | 25    |
| Max Power                                                        | Pmp | [W] | 630   | 661   | 693   | 724   | 756   | 787   |
| Max Power Voltage                                                | Vmp | [V] | 40.78 | 40.82 | 40.86 | 40.90 | 40.94 | 40.98 |
| Max Power Current                                                | Imp | [A] | 15.46 | 16.19 | 16.96 | 17.70 | 18.47 | 19.20 |
| Open Circuit Voltage                                             | Voc | [V] | 48.95 | 48.99 | 49.03 | 49.07 | 49.11 | 49.15 |
| Short Circuit Current                                            | Isc | [A] | 16.36 | 17.01 | 17.66 | 18.31 | 18.96 | 19.61 |

| Mechanical Data  |                                     |
|------------------|-------------------------------------|
| Solar Cell       | N-Type 182mm × 105mm - [12 × 11]    |
| Module Dimension | 2382×1134×30 mm                     |
| Weight           | 33.5 kg                             |
| Front Cover      | Glass - 2mm Semi Tempered AR coated |
| Back Cover       | Glass - 2mm Semi Tempered           |
| Frame            | Silver - Anodized Aluminium Alloy   |
| Junction Box     | IP68 Rated - 3 Bypass Diodes        |
| Cable            | 4.5 mm <sup>2</sup> - 300mm         |

| Temperature Ratings                  |      |   |        |        |
|--------------------------------------|------|---|--------|--------|
| Temperature Coefficient              | Isc  | α | [%/°C] | +0.046 |
| Temperature Coefficient              | Voc  | β | [%/°C] | -0.25  |
| Temperature Coefficient              | Pmax | γ | [%/°C] | -0.30  |
| Nominal Module Operating Temperature | NMOT |   | [°C]   | 43±2   |

| Operating Properties                   |               |
|----------------------------------------|---------------|
| Max System Voltage                     | 1500V         |
| Max System Fuse Rating                 | 30 A          |
| Operational Temperature                | -40 to +85 °C |
| BifacialityTolerance                   | ±5%           |
| Bifaciality = Pmaxrear/Pmaxfront (STC) | 80%           |

| Packaging Information        |      |
|------------------------------|------|
| # Module Per Pallet          | 35   |
| # Pallet per 45'HC Container | 22   |
| # Pallet per 40'HC Container | 20   |
| # PCs per Container 40'HC    | 700  |
| Pallet Weight (kg)           | 1175 |