

# Spirit Series

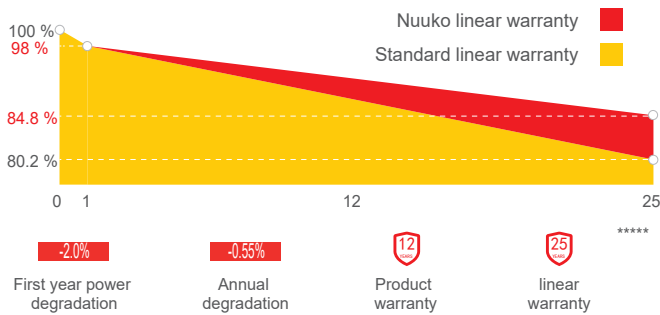
LIVE UP TO GOOD SUNSHINE

NKM-156 (182mm Cell)

**570-590 Watt**

MONOFACIAL MODULE

Industry-leading Warranty based on nominal power



## Features



### High module conversion efficiency

Module efficiency up to 21.1% achieved through advanced cell technology and manufacturing process



### Extended wind and snow load tests

Module certified to withstand extreme wind (2400 Pascal) and snow loads (5400 Pascal) \*



### Excellent weak light performance

More power output in weak light condition, such as cloudy, morning and sunset



### Lower operating temperature

Lower operating temperature and temperature coefficient increases the power output



### Nuuko current sorting process

Up to 2% power loss caused by current mismatch could be diminished by current sorting technique to maximize system power output

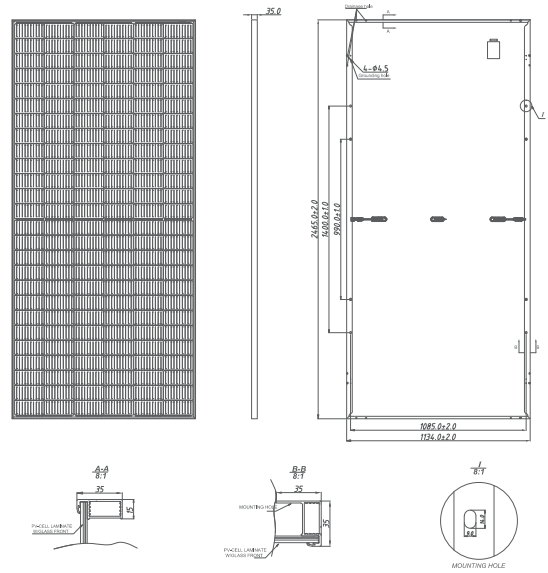


### Withstanding harsh environment

Reliable quality leads to a better sustainability even in harsh environment like desert, farm and coastline

## MECHANICAL SPECIFICATIONS

|                           |  |
|---------------------------|--|
| Cell Type                 | Monocrystalline                            |
| Cell Dimensions           | 182*182mm                                  |
| Cell Arrangement          | 156 (6*26)                                 |
| Weight                    | 31.5kg                                     |
| Module Dimensions         | 2465*1134*35mm                             |
| Cable Length              | Portrait 300mm/Landscape 1200mm/Customized |
| Cable Cross Section Size  | TUV: 4mm <sup>2</sup> /UL: 12AWG           |
| Front Glass               | 3.2mm AR Coating Tempered Glass            |
| No. of Bypass Diodes      | 3/6  |
| Packing Configuration (1) | 31pcs/Pallet, 558pcs/40HQ                  |
| Frame                     | Anodized Aluminium Alloy                   |
| Junction Box              | IP68                                       |



## ELECTRICAL SPECIFICATIONS

| Module Type                   | NKM570-156M10 |       | NKM575-156M10 |       | NKM580-156M10 |       | NKM585-156M10 |       | NKM590-156M10 |       |
|-------------------------------|---------------|-------|---------------|-------|---------------|-------|---------------|-------|---------------|-------|
|                               | STC           | NMOT  | STC           | NMOT  | STC           | NMOT  | STC           | NMOT  | STC           | NMOT  |
| Testing Condition             | STC           | NMOT  | STC           | NMOT  | STC           | NMOT  | STC           | NMOT  | STC           | NMOT  |
| Rated output (Pmp/Wp)         | 570           | 420   | 575           | 424   | 580           | 427   | 585           | 431   | 590           | 435   |
| Maximum Power Voltage(Vmpp/V) | 45.1          | 41.9  | 45.2          | 42.0  | 45.3          | 42.1  | 45.4          | 42.2  | 45.5          | 42.3  |
| Maximum Power Current(Imp/A)  | 12.65         | 10.03 | 12.73         | 10.10 | 12.81         | 10.16 | 12.89         | 10.22 | 12.97         | 10.28 |
| Open Circuit Voltage(Voc/V)   | 53.5          | 50.0  | 53.6          | 50.1  | 53.7          | 50.2  | 53.8          | 50.3  | 53.9          | 50.4  |
| Short Circuit Current(Isc/A)  | 13.38         | 10.79 | 13.46         | 10.85 | 13.54         | 10.91 | 13.62         | 10.98 | 13.70         | 11.04 |
| Module efficiency(%)          | 20.3%         |       | 20.5%         |       | 20.7%         |       | 20.9%         |       | 21.1%         |       |
| Power Tolerance (W)           | 0~+5          |       | 0~+5          |       | 0~+5          |       | 0~+5          |       | 0~+5          |       |

STC: Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM1.5 NMOT: Irradiance at 800W/m<sup>2</sup>, Ambient Temperature 20°C, Air Mass AM1.5, Wind Speed 1m/s

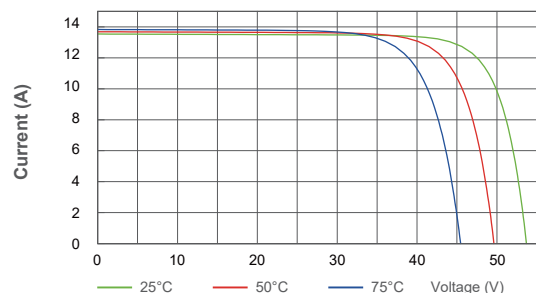
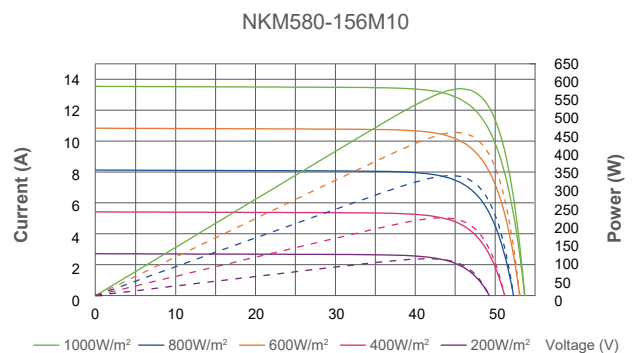
## MAXIMUM RATINGS

|                        |  |
|------------------------|--|
| Maximum System Voltage | 1000V/1500V DC (IEC)                       |
| Operating Temperature  | -40°C ~ +85°C                              |
| Maximum Series Fuse    | 25A  |
| Static Loading         | Snow Loading: 5400Pa/ Wind Loading: 2400Pa |
| Conductivity at Ground | ≤0.1Ω                                      |
| Safety Class           | II   |
| Resistance             | ≥100MΩ                                     |

## TEMPERATURE CHARACTERISTICS

|                                |           |
|--------------------------------|-----------|
| NMOT Temperature               | 43°C±2°C  |
| Temperature Coefficient (Pmax) | -0.36%/°C |
| Temperature Coefficient (Voc)  | -0.26%/°C |
| Temperature Coefficient (Isc)  | 0.043%/°C |

## CURVE & TEMPERATURE DEPENDENCE



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