

MGS 72M10



 530-550W



Superior aesthetics, all-black design



Robust product design for harsh weather conditions



Improved performance in shaded areas



Designed & engineered in the U.S, Made in Dubai


### Certifications:



Intertek




### Headquarter address

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### Manufactured at:

 Magnus Green Solar Panels Manufacturing, National Industries Park, Plot TP010505, Jebel Ali(South), Dubai, United Arab Emirates

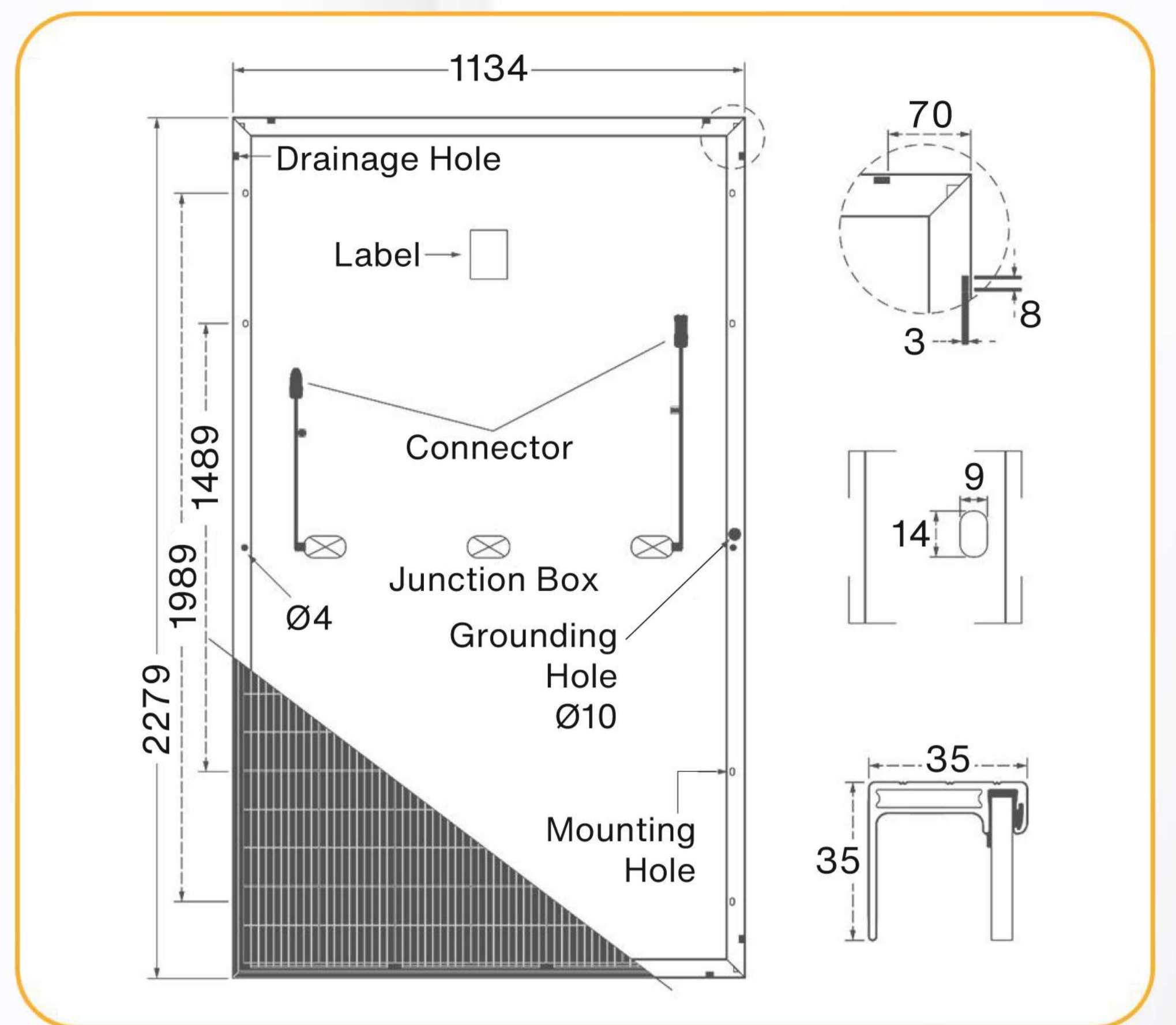
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## MECHANICAL SPECIFICATIONS

|                |  |
|----------------|--|
| Cell Type      | Mono 182x91mm  |
| Weight         | 29kg   |
| Dimension      | 2279x1134x35mm (LxWxT)   |
| Cables         | 4.0mm <sup>2</sup> , Portrait: 300mm(+)/400mm(-)<br>Landscape: 1200mm(+)/1200mm(-) |
| No. of Cells   | 144 (6x24)   |
| Glass          | 3.2mm High Transmission, Antireflection Coating                                    |
| Junction Box   | IP68, 3 Bypass Diodes  |
| Packing        | 31pcs/pallet, 620pcs/40HQ  |
| Connector Type | Staubli Electrical Connectors AG<br>(PV-KST4-EVO2/XY_UR)                           |



Length: ±2mm, Width: ±2mm | Height: ±1mm, Pitch: ±2mm

## ELECTRICAL SPECIFICATIONS

| Module Type                        | MGS-530W-M72H-M10 |       | MGS-535W-M72H-M10 |       | MGS-540W-M72H-M10 |       | MGS-545W-M72H-M10 |       | MGS-550W-M72H-M10 |       |
|------------------------------------|-------------------|-------|-------------------|-------|-------------------|-------|-------------------|-------|-------------------|-------|
|                                    | STC               | NOCT  | STC               | NOCT  | STC               | NOCT  | STC               | NOCT  | STC               | NOCT  |
| Open-Circuit Voltage (Voc/V)       | 49.26             | 46.49 | 49.34             | 46.58 | 49.42             | 46.64 | 49.52             | 46.72 | 49.62             | 46.84 |
| Maximum Power Voltage (Vmp/V)      | 40.56             | 37.86 | 40.63             | 37.92 | 40.70             | 38.06 | 40.80             | 38.23 | 40.90             | 38.43 |
| Short-Circuit Current (Isc/A)      | 13.71             | 11.06 | 13.79             | 11.12 | 13.85             | 11.18 | 13.94             | 11.25 | 14.03             | 11.33 |
| Maximum Power Current (Imp/A)      | 13.07             | 10.40 | 13.17             | 10.48 | 13.27             | 10.54 | 13.36             | 10.60 | 13.45             | 10.64 |
| Maximum Power (Pmax/W)             | 530               | 394   | 535               | 397   | 540               | 401   | 545               | 405   | 550               | 409   |
| Module Efficiency (%)              | 20.58%            |       | 20.77%            |       | 20.96%            |       | 21.16%            |       | 21.35%            |       |
| Power Tolerance                    | ±3%               |       |                   |       |                   |       |                   |       |                   |       |
| Tolerance of Rating Pmax/Isc/Voc % | ±3%/±4%/±3%       |       |                   |       |                   |       |                   |       |                   |       |

NOCT: Irradiance 800w/m<sup>2</sup>, Cell Temperature 20°C, Spectrum AM1.5, Wind Speed 1m/s STC: Irradiance 1000w/m<sup>2</sup>, Cell Temperature 25°C, Spectrum AM1.5

Binning Tolerance: 0 to +5W

## MAXIMUM RATINGS

|                        |                |
|------------------------|----------------|
| Maximum System Voltage | 1500V DC       |
| Operating Temperature  | -40°C to +85°C |
| Maximum Series Fuse    | 25A            |
| Safety Class           | II             |
| Fire Rating            | Class C        |
| Conductivity at Ground | ≤0.1Ω          |
| Resistance             | ≥100MΩ         |

## TEMPERATURE CHARACTERISTICS

|                                |           |
|--------------------------------|-----------|
| NOCT Temperature               | 45°C±2°C  |
| Temperature Coefficient (Pmax) | -0.37%/°C |
| Temperature Coefficient (Voc)  | -0.29%/°C |
| Temperature Coefficient (Isc)  | 0.05%/°C  |

## PERFORMANCE WARRANTY

|   |           |
|---|-----------|
| Max Power Degradation                     | 0.5%/Year |
| 97.5% At The End of 1 <sup>st</sup> Year  |           |
| 93% At The End of 10 <sup>th</sup> Year   |           |
| 85.5% At The End of 25 <sup>th</sup> Year |           |

## CURVE & TEMPERATURE DEPENDENCE

