

1. GUARANTEED TECHNICAL DATA SHEET

The guaranteed technical data sheet shall be as shown in Annex I and the bidder shall complete one for each supply quoted.

Unless otherwise indicated in the proposal, it is understood that the bidder complies with all the requirements set forth in the corresponding standard and the bidder undertakes to full compliance therewith.

ANNEX I - GUARANTEED DATA SHEET

| PANEL SPECIFICATIONS | |
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| General Specifications | |
| Cell Technology Type: | Crystalline Silicon |
| Manufacturer: | Trina Solar |
| Country of Origin: | China |
| Panel Model: | DE17M |
| Product warranty in years (minimum 10 years): | 10 |
| Linear output power warranty. Power at first year / annual degradation rate / power at 10 years / power at 25 years. (Minimum 97% / maximum 0.7% per year / minimum 90% / minimum 80%): | 1 st year: 97.5% 10 th year: 92.10% 25 th year: 83.1% 2.5% - 1 st year 0.60% per year |
| Electrical STC data (1000W/m ² ; AM 1.5; Cell temp 25°C) | |
| Peak power (P _{max} , W _p) (350W ≤ P _{max}): | 450W(50%), 455W(50%) |
| Rated voltage (V _{mp} , V) (36 ≤ V _{mp} (STC) ≤ 40 VDC): | 41.0 / 41.2 |
| Rated current (I _{mp} , A): | 10.98 / 11.06 |
| No-load voltage (V _{oc} , V) (Max. 49 VDC): | 49.6 / 49.8 |
| Short-Circuit Current (I _{sc} , A): | 11.53 / 11.61 |
| Panel Efficiency (STC) (min. 16%): | 20.6 / 20.8 |

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| Operating temperatures between -40 to + 85 °C (C / NC): | C |
| Maximum withstand voltage 1500VDC (C / NC): | C |
| Maximum value of series fuse (A): | 20 |
| Positive power tolerance between (+0 and +5W) (C / NC): | C |
| Electrical parameters at nominal operating cell temperature (NOCT) (800W/m ² ; AM 1.5; Cell room temperature 20°C; wind speed 1m/s) | |
| Peak power (P _{max} , W _p) (min. 250W): | 340 / 344 |
| Rated voltage (V _{mp} , V): | 38.7 / 38.9 |
| Rated current (I _{mp} , A): | 8.77 / 8.84 |
| No-load voltage (V _{oc} , V): | 46.6 / 46.8 |
| Short-Circuit Current (I _{sc} , A): | 9.29 / 9.36 |
| Mechanical data and construction materials | |
| Cell type (Poli or Mono) and dimensions (length mm / width mm): | Mono, 166/83mm |
| Cell No. and arrangement: | 144 half cells |
| BUSBAR No. in cell: | 9 |
| No. of pitch diodes (min. 3): | 3 |
| Panel dimensions (mm) (length 1960mm +/- 10%/ width 992mm +/- 10% / thickness ≤ 45 mm): | 2102 x 1040 x 35 mm |
| Panel weight (22kg +/- 25%): | 24.0kg |
| Front cover (material / thickness): | High Transmission, AR Coated Heat Strengthened Glass / 3.2 mm |
| Rear cover (material): | White KPX Backsheet |

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| Frame (material/color/anodized color/edge sealing): | Anodized Aluminium Alloy |
| J-Box degree of IP protection (min. IP 67): | IP68 |
| Cable (mm) (length / cross section): | 1400mm / 4.0mm ² |
| Connector (type / degree of IP protection): | TS4 / IP68 |
| Temperature characteristics | |
| Temperature coefficient of Pmax ($\leq 0.41\%/^{\circ}\text{C}$): | -0.34%/°C |
| Temperature Coefficient of Voc ($\geq 0.28\%/^{\circ}\text{C}$): | -0.25%/°C |
| Temperature coefficient of Isc ($\leq 0.06\%/^{\circ}\text{C}$): | 0.04%/°C |
| Nominal operating temperature of the cell (NOCT(°C)) (max. 47°) | 43°C ($\pm 2^{\circ}\text{C}$) |
| Operating conditions | |
| Maximum front static load (5400 Pa) (e.g. Snow) (C / NC): | C |
| Maximum rear static load (2400 Pa) (e.g. Snow) (C / NC): | C |
| Max. Impact by hail (diameter/level): | 25mm / 23m/s |
| Module Fire Performance (TYPE 1 (UL 1703) or CLASS C (IEC 61730)): | Class C |
| Type of electrical insulation Class II (C / NC) | C |
| Application Classification (Class A) (C / NC): | C |
| Certificates | |
| IEC 61215 Certificate (C / NC): | C |
| IEC 61730 and/or UL1703 Certificate (C / NC): | C |
| IEC 60891 Certificate (C / NC): | Cumple pero no es certificable. |
| IEC 61701 Certificate (C / NC): | C |

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| IEC 62716 Certificate (C / NC): | C |
| IEC 62804 Certificate (C / NC): | C |
| IEC 62790 Junction Box Certificate (C / NC): | C |
| Tested in accordance with IEC 60904 Standard (C / NC) | C |
| Packing | |
| No. of panels per pallet: | 30 |
| No. of pallets per container of 40': | 22 |
| Dimensions of the packing box (L/W/H): | 2140 / 1120 / 1196 |
| Box weight: | 768 kg |
| International Safe Transit Association (ISTA) and/or IEC Certificate (C / NC) | C |

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| Solar Cable | |
| Country of Origin: | China |
| Manufacturer: | Trina |
| Material of tinned CU conductor (C / NC): | C |
| Insulation level 1500 VDC (C / NC): | C |
| Maximum current: | 15A |
| Section (min. 4mm): | 4mm ² |
| Length (min. 900mm): | Landscape: 1400mm |
| Insulation material: | PPE |
| IEC 62930 Certificate (C / NC) | C |
| Terminals | |
| Country of Origin: | China |
| Manufacturer: | Trina |
| MC4 Type (C/NC): | TS4 /MC4 compatible |

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| Constructive material CU tinned (C / NC): | C |
| IP Grade: | IP 68 |
| Maximum current: | TS4 : 41A |
| Insulation level: | 1500V |
| IEC 62852 Certificate (C / NC) | C |

In the Guaranteed Data Table, the abbreviations (C/NC) mean "Compliant" (C) and "Non-compliant" (NC), respectively.

For example:

- In the line "IEC 61215 Certificate (C/NC)": you must fill in the form in the second column with C if the panel has the current certificate or with NC if it does not.
- In the line Operating temperatures between -40 to + 85 °C (C/NC): If the Panel can operate between -40 to + 85 °C, the second column must be filled with C, otherwise with NC.