

| PARAMETER ITMES            |   | Db Mono   | Kb Poly   | Cb Mono   | Lb Poly   | Rb Poly   | Rb Poly   | Md Poly   | Md Poly   | Sb Poly   | Sb Poly   | Sb Poly   | Bb Mono   | Bb Mono   | Tb Poly   | Tb Poly   | Tb Poly   |   |
|----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|                            |   | STP005B -12/DEA   | STP010D -12/KEA   | STP020B -12/CEA   | STP030D -12/LEA   | STP040D -12/REA   | STP045D -12/REA   | STP050D -12/MEA   | STP055D -12/MEA   | STP060D -12/SEA   | STP065D -12/SEA   | STP070D -12/SEA   | STP080B -12/BEA   | STP085B -12/BEA   | STP130D -12/TEA   | STP135D -12/TEA   | STP140D -12/TEA   |   |
| ELECTRICAL CHARACTERISTICS | Open-Circuit Voltage (Voc)                | 21.6V   | 21.6V   | 21.7V   | 21.6V   | 21.8V   | 22.0V   | 21.8V   | 22.2V   | 21.6V   | 21.8V   | 22.0V   | 21.9V   | 22.2V   | 22.0V   | 22.3V   | 22.4V   |   |
|                            | Optimum Operating Voltage (Vmp)           | 17.4V   | 17.4 A  | 17.6V   | 17.2V   | 17.4V   | 17.6V   | 17.4V   | 17.5V   | 17.4V   | 17.6V   | 17.8V   | 17.5V   | 17.8V   | 17.4V   | 17.5V   | 17.6V   |   |
|                            | Short - Circuit Current (Isc)             | 0.32A   | 0.65A   | 1.26A   | 1.94A   | 2.58A   | 2.79A   | 3.13A   | 3.34A   | 3.90A   | 4.11A   | 4.27A   | 4.95A   | 5.15A   | 8.09A   | 8.20A   | 8.33A   |   |
|                            | Optimum Operating Current (Imp)           | 0.29A   | 0.57A   | 1.14A   | 1.74A   | 2.30A   | 2.58A   | 2.93A   | 3.14A   | 3.45A   | 3.69A   | 3.93A   | 4.58A   | 4.80A   | 7.47A   | 7.71A   | 7.95A   |   |
|                            | Maximum Power at STC (Pmax)               | 5Wp   | 10Wp  | 20Wp  | 30Wp  | 40Wp  | 45Wp  | 50Wp  | 55Wp  | 60Wp  | 65Wp  | 70Wp  | 80Wp  | 85Wp  | 130Wp   | 135Wp   | 140Wp   |   |
|                            | Operating Temperature                     | -40°C to +85°C  | -40°C to +85°C  | -40°C to +85°C  | -40°C to +85°C  | -40°C to +85°C  | -40°C to +85°C  | -40°C to +85°C  | -40°C to +85°C  | -40°C to +85°C  | -40°C to +85°C  | -40°C to +85°C  | -40°C to +85°C  | -40°C to +85°C  | -40°C to +85°C  | -40°C to +85°C  | -40°C to +85°C  |   |
|                            | Maximum System Voltage                    | 715V DC   | 715V DC   | 715V DC   | 715V DC   | 715V DC   | 715V DC   | 715V DC   | 715V DC   | 715V DC   | 715V DC   | 715V DC   | 715V DC   | 715V DC   | 715V DC   | 1000V DC  | 1000V DC  | 1000V DC  |
|                            | Maximum Series Fuse Rating                | 5A  | 5A  | 5A  | 5A  | 10A   | 10A   | 5A  | 5A  | 15A   | 15A   | 15A   | 15A   | 15A   | 20A   | 20A   | 20A   |   |
|                            | Power Tolerance                           | ±10%  | ±10%  | ±10%  | ±10%  | ±5%   | ±5%   | ±5%   | ±5%   | ±5%   | ±5%   | ±5%   | ±5%   | ±5%   | ±5%   | ±5%   | ±5%   |   |
| MECHANICAL CHARACTERISTICS | Solar Cell                                | Mono-crystalline 125x125mm (5inch)                                    | Poly-crystalline 156x156mm (6inch)                                    | Mono-crystalline 125x125mm (5inch)                                    | Poly-crystalline 156x156mm (6inch)                                    | Poly-crystalline 156x156mm (6inch)                                    | Poly-crystalline 156x156mm (6inch)                                    | Poly-crystalline 156x156mm (6inch)                                    | Poly-crystalline 156x156mm (6inch)                                    | Poly-crystalline 156x156mm (6inch)                                    | Poly-crystalline 156x156mm (6inch)                                    | Poly-crystalline 156x156mm (6inch)                                    | Mono-crystalline 125x125mm (5inch)                                    | Mono-crystalline 125x125mm (5inch)                                    | Poly-crystalline 156x156mm (6inch)                                    | Poly-crystalline 156x156mm (6inch)                                    | Poly-crystalline 156x156mm (6inch)                                    |   |
|                            | No. of Cells                              | 36 (4x9)  | 36 (4x9)  | 36 (2x18)   | 36 (4x9)  | 36 (4x9)  | 36 (4x9)  | 36 (4x9)  | 36 (4x9)  | 36 (4x9)  | 36 (4x9)  | 36 (4x9)  | 36 (4x9)  | 36 (4x9)  | 36 (4x9)  | 36 (4x9)  | 36 (4x9)  |   |
|                            | Dimensions                                | 216x306 x18 mm  | 310x368 x18 mm  | 656x306 x18 mm  | 426x680 x18 mm  | 537x665 x30 mm  | 537x665 x30 mm  | 631x665 x30 mm  | 631x665 x30 mm  | 771x665 x30 mm  | 771x665 x30 mm  | 771x665 x30 mm  | 771x665 x30 mm  | 1195x541 x30 mm   | 1195x541 x30 mm   | 1482x676 x35 mm   | 1482x676 x35 mm   | 1482x676 x35 mm   |
|                            | Weight                                    | 0.8 kg  | 1.5 kg  | 2.5 kg  | 3.2 kg  | 4.5 kg  | 4.5 kg  | 6.4 kg  | 6.4 kg  | 6.2 kg  | 6.2 kg  | 6.2 kg  | 8.0 kg  | 8.0 kg  | 12.0 kg   | 12.0 kg   | 12.0 kg   |   |
|                            | Junction Box                              | IP65 rated  | IP65 rated  | IP65 rated  | IP65 rated  | IP65 rated  | IP65 rated  | IP65 rated  | IP65 rated  | IP65 rated  | IP65 rated  | IP65 rated  | IP65 rated  | IP65 rated  | IP65 rated  | IP65 rated  | IP65 rated  |   |
|                            | Output Cables                             | H+S(12AWG) Lengths: 750mm(-) and 750mm(+) Connection: MC Plug Type IV | H+S(12AWG) Lengths: 750mm(-) and 750mm(+) Connection: MC Plug Type IV | H+S(12AWG) Lengths: 750mm(-) and 750mm(+) Connection: MC Plug Type IV | H+S(12AWG) Lengths: 750mm(-) and 750mm(+) Connection: MC Plug Type IV | H+S(12AWG) Lengths: 750mm(-) and 750mm(+) Connection: MC Plug Type IV | H+S(12AWG) Lengths: 750mm(-) and 750mm(+) Connection: MC Plug Type IV | H+S(12AWG) Lengths: 750mm(-) and 750mm(+) Connection: MC Plug Type IV | H+S(12AWG) Lengths: 750mm(-) and 750mm(+) Connection: MC Plug Type IV | H+S(12AWG) Lengths: 750mm(-) and 750mm(+) Connection: MC Plug Type IV | H+S(12AWG) Lengths: 750mm(-) and 750mm(+) Connection: MC Plug Type IV | H+S(12AWG) Lengths: 750mm(-) and 750mm(+) Connection: MC Plug Type IV | H+S(12AWG) Lengths: 750mm(-) and 750mm(+) Connection: MC Plug Type IV | H+S(12AWG) Lengths: 750mm(-) and 750mm(+) Connection: MC Plug Type IV | H+S(12AWG) Lengths: 750mm(-) and 750mm(+) Connection: MC Plug Type IV | H+S(12AWG) Lengths: 750mm(-) and 750mm(+) Connection: MC Plug Type IV | H+S(12AWG) Lengths: 750mm(-) and 750mm(+) Connection: MC Plug Type IV | H+S(12AWG) Lengths: 750mm(-) and 750mm(+) Connection: MC Plug Type IV |
| TEMP. COEFFICIENT          | Nominal Operating Cell Temperature (NOCT) | 45±2°C  | 45±2°C  | 45±2°C  | 45±2°C  | 45±2°C  | 45±2°C  | 45±2°C  | 45±2°C  | 45±2°C  | 45±2°C  | 45±2°C  | 45±2°C  | 45±2°C  | 45±2°C  | 45±2°C  | 45±2°C  |   |
|                            | Temp. coefficient of Pmax                 | -0.48%/°C   | -0.47%/°C   | -0.48%/°C   | -0.47%/°C   | -0.48%/°C   | -0.48%/°C   | -0.47%/°C   | -0.47%/°C   | -0.47%/°C   | -0.47%/°C   | -0.47%/°C   | -0.48%/°C   | -0.48%/°C   | -0.47%/°C   | -0.47%/°C   | -0.47%/°C   |   |
|                            | Temp. coefficient of Voc                  | -0.34%/°C   | -0.34%/°C   | -0.34%/°C   | -0.34%/°C   | -0.34%/°C   | -0.34%/°C   | -0.34%/°C   | -0.34%/°C   | -0.34%/°C   | -0.34%/°C   | -0.34%/°C   | -0.34%/°C   | -0.34%/°C   | -0.34%/°C   | -0.34%/°C   | -0.34%/°C   |   |
|                            | Temp. coefficient of Isc                  | 0.037%/°C   | 0.045%/°C   | 0.037%/°C   | 0.045%/°C   | 0.037%/°C   | 0.037%/°C   | 0.045%/°C   | 0.045%/°C   | 0.045%/°C   | 0.045%/°C   | 0.045%/°C   | 0.037%/°C   | 0.037%/°C   | 0.045%/°C   | 0.045%/°C   | 0.045%/°C   |   |