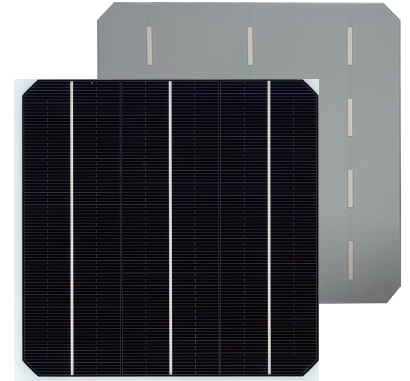


XS156B3-210R+

Monocrystalline X-Cells

| | |
|----------------------|--|
| Dimension | 156.75mm x 156.75mm ± 0.25mm |
| Diagonal | 210mm ± 0.5mm (round chamfers) |
| Thickness(Si) | 180µm ± 20µm, 200µm ± 20µm |
| Front | Anisotropically texturized surface and dark silicon nitride anti-reflection coatings 1.4mm silver busbars |
| Back | Full-surface aluminum back-surface field 2.5mm (silver / aluminum) discontinuous soldering pads |

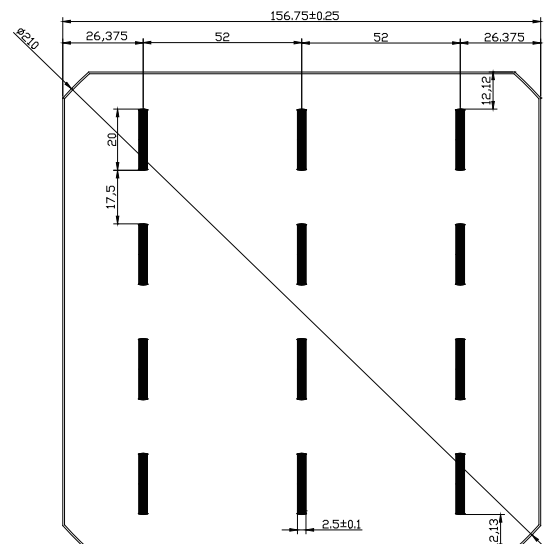
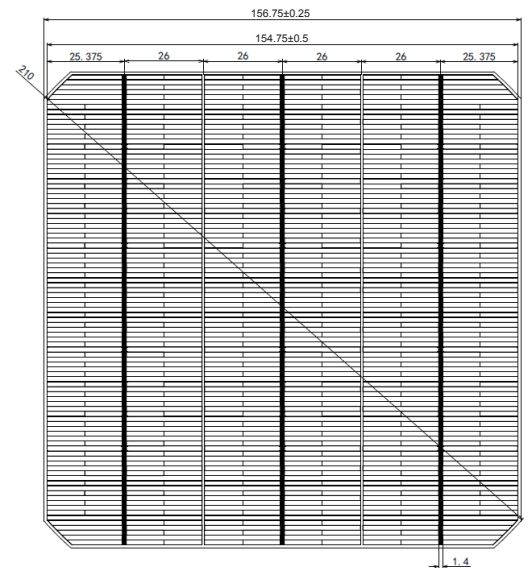


► Features

- > High conversion efficiencies resulting in superior power output performance
- > Outstanding power output even in low light or high temperature conditions
- > Optimized design for ease of soldering and lamination
- > Long-term stability, reliability and performance
- > Low breakage rate
- > Color uniformity

► Production and Quality Control

- > Precision cell efficiency sorting procedures
- > Stringent criteria for color uniformity and appearance
- > Reverse current and shunt resistance screening
- > ISO9001, ISO14001 and OHSAS 18001 certificated
- > Calibrated against Fraunhofer ISE



* See the reverse side for more detail

Electrical Performance

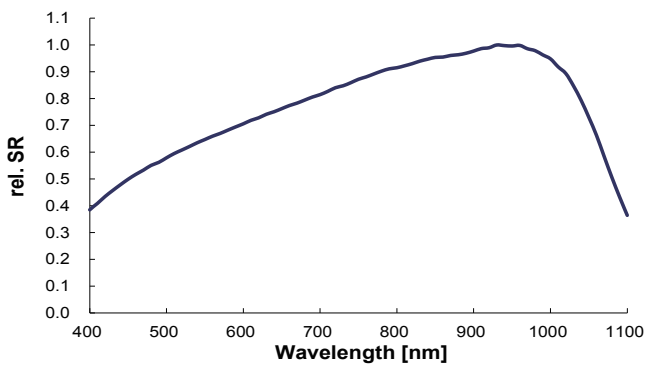
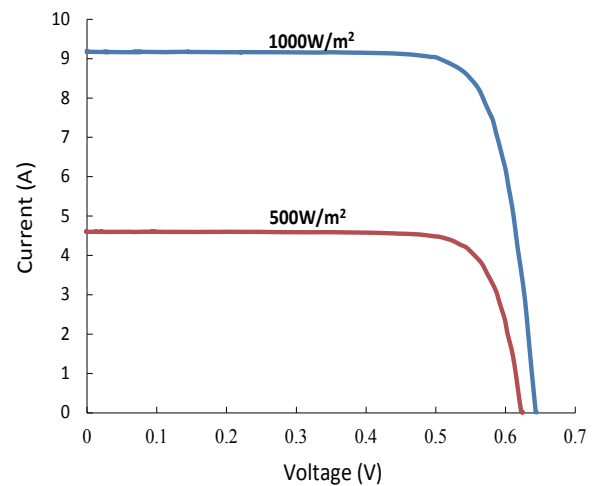
| | | 198 | 197 | 196 | 195 |
|------------------------------|--------|-------|-------|-------|-------|
| Efficiency | Eff(%) | 19.80 | 19.70 | 19.60 | 19.50 |
| Power | Ppm(W) | 4.84 | 4.81 | 4.79 | 4.76 |
| Max. Power Current | Ipm(A) | 8.87 | 8.83 | 8.80 | 8.76 |
| Short Circuit Current | Isc(A) | 9.36 | 9.31 | 9.28 | 9.25 |
| Max. Power Voltage | Vpm(V) | 0.546 | 0.545 | 0.544 | 0.544 |
| Open Circuit Voltage | Voc(V) | 0.644 | 0.644 | 0.643 | 0.643 |
| Efficiency Code | | 194 | 193 | 192 | 190 |
| Efficiency | Eff(%) | 19.40 | 19.30 | 19.20 | 19.00 |
| Power | Ppm(W) | 4.74 | 4.72 | 4.69 | 4.64 |
| Max. Power Current | Ipm(A) | 8.73 | 8.69 | 8.66 | 8.59 |
| Short Circuit Current | Isc(A) | 9.23 | 9.19 | 9.16 | 9.09 |
| Max. Power Voltage | Vpm(V) | 0.543 | 0.542 | 0.542 | 0.540 |
| Open Circuit Voltage | Voc(V) | 0.643 | 0.642 | 0.642 | 0.641 |

Standard test conditions: AM1.5, 1000W/m², 25°C. Average accuracy of all tested figures is ±1.5% rel.

Temperature Coefficients

| | | |
|--|----------------|-----------|
| Current Temperature Coefficient | $\alpha(Isc)$ | 0.03%/°C |
| Voltage Temperature Coefficient | $\beta(Voc)$ | -0.34%/°C |
| Power Temperature Coefficient | $\gamma(Pmax)$ | -0.43%/°C |

Standard test conditions : AM1.5, 1000W/m², 25°C.

Spectral Response(SR)

IV Curve


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