

series polycrystalline

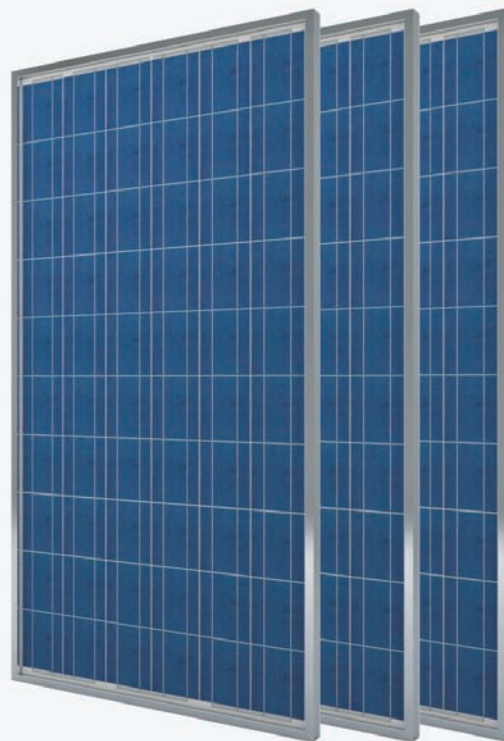
230W / 235W / 240W / 245W / 250W

FEATURES

- High module conversion efficiency up to 15.4%, through superior manufacturing technology.
- Guaranteed 0 to +5% power tolerance.
- Robust and corrosion free modules. Entire module certificated to withstand high wind loads and snow loads up to 5400Pa.
- Anodized aluminum frame improves load resistance capabilities.
- Highly transparent, low-iron, and tempered glass and antireflective coating.
- Excellent performance under low light environments.

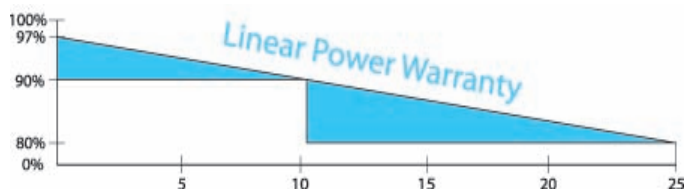
BENEFITS

- International certificates to ensure the best quality and performance.
- Manufacturing process certified under the ISO 9001 standards.
- Product liability insurance.
- Local technical support.
- Enhanced design for easy installation and long term reliability.

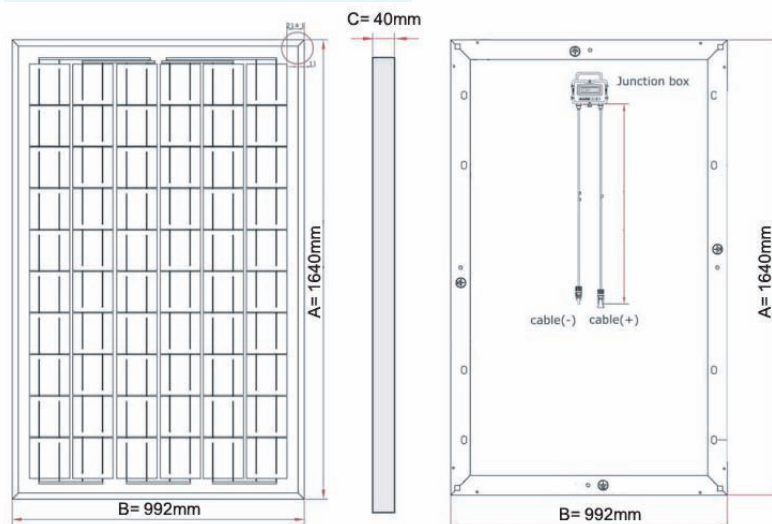


WARRANTIES

- 10-years warranty on material and workmanship.
- Linear power output warranty: power output decrease yearly. Year 25 rated power output not below than 80%.
- Additional warranted production insurance by top world insurance companies.



PHYSICAL CHARACTERISTICS



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230W / 235W / 240W / 245W / 250W

ELECTRICAL SPECIFICATION

| STC | P60-250 | P60-245 | P60-240 | P60-235 | P60-230 |
|-----------------------------|------------------|---------|---------|---------|---------|
| Nominal Power (Pmax) | 250 W | 245 W | 240 W | 235 W | 230 W |
| Voltage at Pmax (Vmp) | 30.1 V | 29.9 V | 29.7 V | 29.5 V | 29.3 V |
| Current at Pmax (Imp) | 8.30 A | 8.19 A | 8.08 A | 7.96 A | 7.84 A |
| Open Circuit Voltage (Voc) | 37.9 V | 37.7V | 37.5 V | 37.3 V | 37.2 V |
| Short Circuit Current (Isc) | 8.65 A | 8.57 A | 8.48 A | 8.40 A | 8.31 A |
| Module efficiency | 15.37% | 15.06% | 14.75% | 14.44% | 14.14% |
| Power Tolerance | 0, +5% | | | | |
| Max. system voltage | 1.000 V DC | | | | |
| Max. series fuse rating | 20 A | | | | |
| Operating temperature range | -40 °C to +85 °C | | | | |

Electric characteristics at standard conditions (STC)
STC conditions: Irradiance: 1.000W/m2, cell temperature: 25°C, AM=1.5

| NOCT | P60-250 | P60-245 | P60-240 | P60-235 | P60-230 |
|-----------------------------|---------|---------|---------|---------|---------|
| Nominal Power (Pmax) | 182 W | 178 W | 175 W | 171 W | 167 W |
| Voltage at Pmax (Vmp) | 27.5 V | 27.3 V | 27.1 V | 26.8 V | 26.5 V |
| Current at Pmax (Imp) | 6.62 A | 6.53 A | 6.46 A | 6.38 A | 6.30 A |
| Open Circuit Voltage (Voc) | 34.8 V | 34.7V | 34.5 V | 34.4 V | 34.2 V |
| Short Circuit Current (Isc) | 7.04 A | 6.99 A | 6.93 A | 6.88 A | 6.82 A |

Electric characteristics at normal operation conditions (NOCT)
NOCT conditions: Irradiance: 800W/m2, ambient temperature: 20°C, AM=1.5, wind speed: 1m/s

THERMAL CHARACTERISTICS

| | |
|---|-------------|
| Nominal operating cell temperature (NOCT) | 45 ± 2 °C |
| Temperature coefficient of Pmax | -0.45 %/°C |
| Temperature coefficient of Voc | -0.33 %/°C |
| Temperature coefficient of Isc | +0.06 %/°C |
| Temperature coefficient of Vmp | -0.420 %/°C |

PACKAGING

| | |
|--------------------------------------|----|
| Modules per pallet | 21 |
| N° of pallets per HC container (40') | 28 |

PARTNER

MECHANICAL CHARACTERISTICS

| | |
|----------------------------------|---------------------------------------|
| Solar cells | Poly-crystalline silicon 156 x 156 mm |
| Cell arrangement | 60 cells in series |
| Dimensions | 1640x992x40 mm |
| Weight | 19.5 kg |
| Max. load | 5400 Pa |
| Front cover | Low-iron tempered glass 3.2 mm |
| Frame | Anodized aluminum alloy |
| Encapsulant | EVA (ethylene vinyl acetate) |
| Junction box (protection degree) | IP65 |
| Bypass diodes | 6 |
| Cables (length / area) | ≥1000 mm / 4 mm ² |
| Connectors | MC4 |