

SINO DEU 中德

190W Mono-crystalline Solar Panel

Features

- High conversion efficiency based on innovative photovoltaic technologies
- Withstands high wind-pressure and snow load, and extreme temperature variations
- Low voltage-temperature coefficient allows higher power output at high-temperature condition

Quality and Safety

- 25-year power output transferable warranty
- ISO 9001:2000 (Quality Management System) and ISO 14001:2004 (Environmental Management System) certified factories manufacturing world class products
- Proven materials, tempered front glass, and a sturdy anodized aluminum frame allow modules to operate reliably in all kinds of complex configuration
- Ultra reliable bypass diodes prevent damage through overheating due to shaded or defective cells
- Innovative, environmentally packing method ensures modules arrived in perfect condition

Recommended Applications

- Residential roof top systems
- On-grid utility systems
- On-grid commercial systems



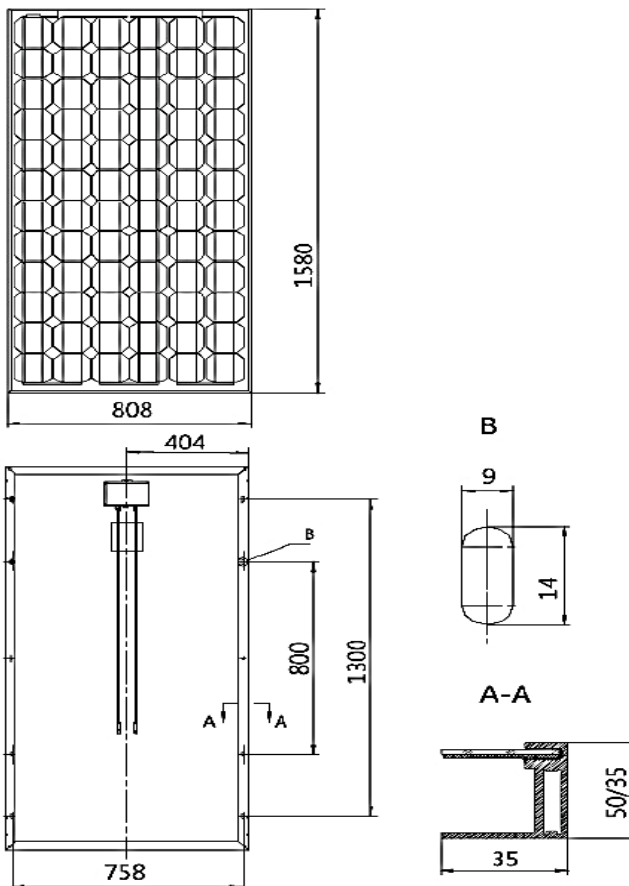
Pricing – schedules available on request

Contacts and further information

Tel: (02) 9466 6000 or 1300 511 148

Email: pvorders@emeraldplanet.com.au Web: emeraldplanet.com.au

Type	ZD190-24M
Maximum Power at STC (Pmax)	190Wp
Open Circuit Voltage (Voc)	45V
Short-Circuit Current(isc) [A]	5.5A
Optimum Operating Voltage(Vmp) [V]	36.2V
Optimum Operating Current(Imp) [A]	5.25A
Temperature Range	-40°C to +90°C
Maximum System Voltage	1000V
Maximum Series Fuse Rating	10A
Power Tolerance	±3%
Panel Efficiency	14.88%



Mechanical Characteristics

Solar Cell	Monocrystalline solar cells (125mmx125mm)
No. of Cells	6x12 pieces
Dimension	1580x808mm (LxW)
Front glass	White toughened safety glass, 3.nmm
Frame	Anodised aluminium profile
Junction box	With 3 bypass diodes
Cable	Length 900mm, 1x4mm ²
Cell encapsulation	EVA (ethylene-Vinyl-Acetate)
Back	Composite film
Maximum surface load capacity	Tested up to 2,400 Pa according to IEC 61215 (advanced test)
Hail	Maximum diameter of 25 mm with impact speed of 23m/s

Temperature Coefficients

Nominal Operating Cell Temperature(NOCT)	40°C±2°C
Voltage temperature coefficients	-0.37%/K
Current temperature coefficients	+0.03%/K
Power temperature coefficients	-0.52%/K

The electrical data relates to standard test conditions [STC]: 1,000 W/m²; AM 1.5 25°C. Performance deviation of P_{mpp} -/+ 3%. Performance deviation of Voc[V], I_{sc}[A], V_{mpp} [V] and I_{mpp} [A]: -/+ 10%. Certified in accordance with IEC 61215 and IEC 61730-1/2.

Panels may be substituted for equivalent panels at any time. All panels supplied appear on the Clean Energy Council List of Approved products.

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