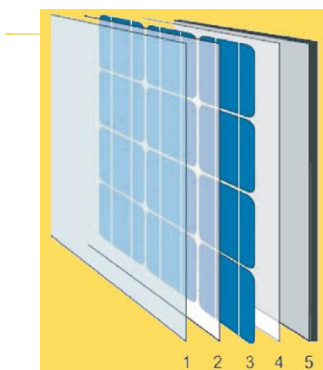


ALM-190D-24

Mono-Crystalline Solar Modules



Companies Profile

Alex solar will be Vertical Integration, from ingots , wafer , cells and modules all reach 1GW in 2011. Besides we produce our own junction box as well as frame ... We are also project developer.

Characteristics

- High cell efficiency to ensure stability and reliability
- High performing modules have an industry low tolerance of 3%
- High reliable schottky bypass diode minimizes power drop by shade.
- Bad weather withstand Junction BOX, Crosslink cable and low connection losses connectors
- Can withstand high wind-pressure, snow load and extreme temperature
Module can bear snow loads up to 5400Pa and wind loads up to 2400pa.
- Bonded warehouse and technical support team locally

Composition

- 1、 Tempered Glass
- 2、 EVA
- 3、 Solar Cell
- 4、 EVA
- 5、 Triple-layer back sheet

Quality and Warranty

- 10 years limited warranty on material and workmanship
- 10 years warranty on power output not lower than 90%
- 25 years warranty on power output not lower than 80%
- ISO 9001:2008 (Quality Management System) certified factory
- CE, IEC61215, IEC61730, RINA, MSC, CEC, UL certified products.
- Chubb insurance on each panel



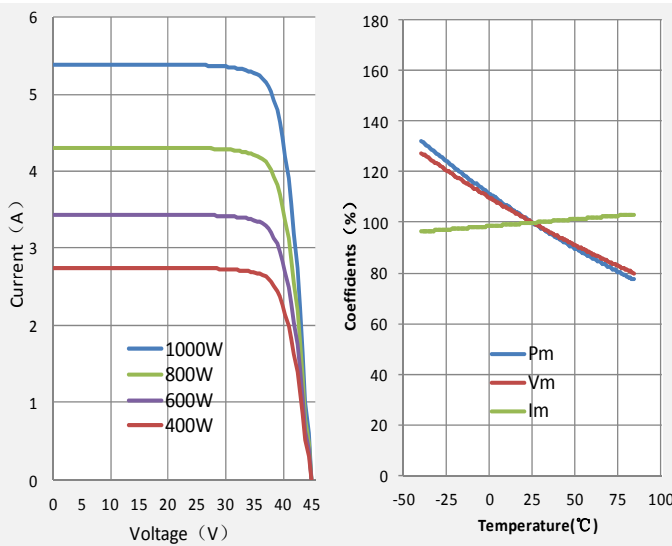
RINA



TYPICAL ELECTRICAL CHARACTERISTICS

| Type | ALM-185D-24 | ALM-187D-24 | ALM-190D-24 | ALM-195D-24 | ALM-200D-24 | ALM-205D-24 |
|--|--|-------------|-------------|-------------|-------------|-------------|
| Maximum power (Pmax) | 185W | 187W | 190W | 195W | 200W | 205W |
| Power Tolerance | ±3% | ±3% | ±3% | ±3% | ±3% | ±3% |
| Open Circuit Voltage(Voc) | 44.50V | 44.60V | 44.70V | 44.90V | 45.1V | 45.3V |
| Short Circuit Current (Isc) | 5.58A | 5.64A | 5.70A | 5.82A | 5.9A | 5.96A |
| Maximum Power Voltage (Vmp) | 35.60V | 35.60V | 36.00V | 36.40V | 36.8V | 37.2V |
| Maximum Power Current(Imp) | 5.2A | 5.25A | 5.29A | 5.38A | 5.43A | 5.51A |
| Cell Efficiency | 17.29% | 17.3% | 17.57% | 18.03% | 18.5% | 18.96% |
| Module Efficiency | 14.49% | 14.65% | 14.88% | 15.27% | 15.67% | 16.06% |
| Max. System Voltage | 1000VDC | | | | | |
| Cell Size and Series | 5" (125mm)*5" (125mm) mono 72pcs(6*12) | | | | | |
| Bypass Diodes | 3pcs 9A | | | | | |
| Temperature Coefficients of Pmax | -0.431%/°C | | | | | |
| Temperature Coefficients of Voc | -0.375%/°C | | | | | |
| Temperature Coefficients of Isc | +0.055%/°C | | | | | |
| NOTC- Nominal Operating Cell Temperature | 47°C (±2) | | | | | |
| STC Condition | Irradiance level 1,000W/m2, Spectrum AM 1.5, and Cell Temperature 25°C | | | | | |

TYPICAL ELECTRICAL CHARACTERISTICS



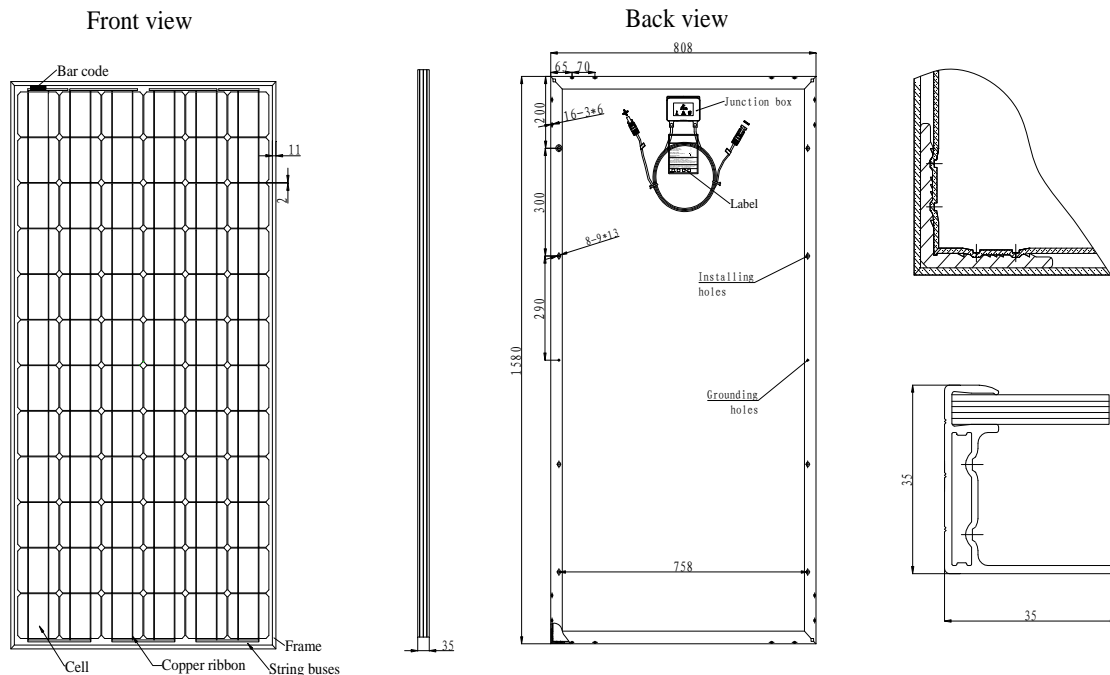
MECHANICAL CHARACTERISTICS

| | |
|-------------------------------|--|
| Surface Maximum Load Capacity | 2,400Pa |
| Allowable Hail Load | 227g steel ball fall down from 1m height |
| Glass type | High Transmits. Low Iron. Tempered Glass |
| Frame | Aluminium-alloy |
| Dimensions (mm) | 1,580mm(L)×808mm(W)×40mm(H) |
| Weight(kg) | 16 kgs |
| Dielectric Insulation Voltage | 3000VDC max |
| Operating Temperature | -40 ~ +85 °C |
| Storage Temperature | -40 ~ +85 °C |
| Cable Length | 900mm |

PACKAGE INFORMATION

| | |
|--------|-----------------|
| Carton | 26pcs/ctn |
| Pallet | 52pcs/plt |
| 20"GP | 7plts (300pcs) |
| 40"GP | 14plts (728pcs) |

DIMENSIONS



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