



WHY LDK SOLAR MODULES

- Industry leading module power output warranty
- International quality, safety and performance certifications
- Modules manufactured in ISO 9001 certified factories
- High-reliability with guaranteed 0/+5 W positive power tolerance

WARRANTIES

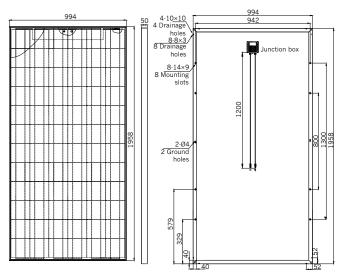
- 10 years for product defects in materials & workmanship **Linear Power Warranty**
- Year 1: power output not below 97% of Nominal Output
- From year 2 up to year 25: power output yearly decrease of 0.7%
- Year 25: power output not below 80.2% of Nominal Output

CERTIFICATES

- IEC EN 61215, IEC EN 61730-1-2, CE Conformity
- UL 1703 2002/03/15 Ed:3 Rev:2008/04/08
- ULC/ORD-C1703-01 second edition 2001/01/01
- UL and Canadian standard for safety flat-plate
- CEC Listed: modules are eligible for California rebates
- MCS The Microgeneration Certification Scheme UK
- ISO 9001:2008 Quality Management System
- PV CYCLE: voluntary module take back and recycling program

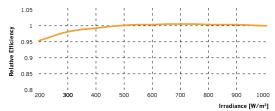
DIMENSIONS

CE D D PV CYCLE



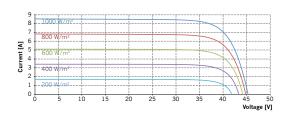
Tolerance of length and width dimensions is ± 2 mm

PERFORMANCE AT LOW IRRADIANCE



The typical relative change in module efficiency at an irradiance of $200W/m^2$ in relation to $1000W/m^2$ (both at $25^{\circ}C$ and AM 1.5 spectrum) is less than 5%

I-V CURVE AT DIFFERENT IRRADIANCE LEVELS



Above graphics according to LDK-295P-24

MULTICRYSTALLINE MODULES LDK-290P-24 Professional Series



ELECTRIC CHARACTERISTICS (STC*)

| ТҮРЕ | 290P-24 | 295P-24 | 300P-24 |
|---------------------------------|----------------------------|---------|---------|
| Nominal Power (Pmax) [W] | 290 | 295 | 300 |
| Voltage at Pmax (Vmp) [V] | 36.1 | 36.6 | 37.0 |
| Current at Pmax (Imp) [A] | 8.04 | 8.08 | 8.12 |
| Open Circuit Voltage (Voc) [V] | 45.1 | 45.3 | 45.6 |
| Short Circuit Current (Isc) [A] | 8.51 | 8.54 | 8.58 |
| Tolerance on Nominal Power [W] | -0/+5 | -0/+5 | -0/+5 |
| Maximum System Voltage | IEC EN: 1000 V / UL: 600 V | | |
| Cell Efficiency [%] | 16.55 | 16.84 | 17.12 |
| Module Efficiency [%] | 14.91 | 15.16 | 15.41 |

STC* (Standard Test Conditions): Irradiance 1000 W/m², Module Temperature 25 °C, Air Mass 1.5 Best in Class AAA solar simulator (IEC 60904-9) used, power measurement uncertainty is within +/-3%

ELECTRICAL PERFORMANCE AT NOCT

| TYPE | 290P-24 | 295P-24 | 300P-24 |
|---------------------------------|---------|---------|---------|
| Power Output (Pmax) [W] | 211 | 215 | 218 |
| Voltage at Pmax (Vmp) [V] | 32.8 | 33.3 | 33.6 |
| Current at Pmax (Imp) [A] | 6.43 | 6.46 | 6.50 |
| Open Circuit Voltage (Voc) [V] | 41.7 | 41.9 | 42.2 |
| Short Circuit Current (Isc) [A] | 6.89 | 6.91 | 6.95 |

NOCT: Irradiance 800 W/m², Module Temperature 45 \pm 2°C, Wind Speed 1 m/s Best in Class AAA solar simulator (IEC 60904-9) used, power measurement uncertainty is within +/-3%

TEMPERATURE CHARACTERISTICS

| TYPE | LDK-P-24 Series | | |
|---------------------------------|--------------------|--|--|
| 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 | | |
| Maximum Series Fuse Rating | 20 A | | |
| Operating Temperature | from -40 to +85 °C | | |
| Storage Temperature | from -40 to +60 °C | | |
| | | | |

NOCT** (Nominal Operating Cell Temperature): Irradiance 800 W/m², Air 20 °C, Wind Speed 1 m/s

PACKING CONFIGURATION

| TYPE | LDK-P-24 Series | | |
|-----------------------|---|--|--|
| Packing Configuration | 20 pcs. / box | | |
| Quantity / Pallet | 40 pcs. / pallet | | |
| Loading Capacity | 440 pcs. / 40 ft (High Cube Container) | | |

MECHANICAL CHARACTERISTICS

| ТҮРЕ | LDK-P-24 Series | | |
|--------------|--|--|--|
| Solar Cells | 72 (6x12) multicrystalline silicon solar cells 156 x 156 mm | | |
| Front Glass | 4.0 mm thick, tempered glass / AR coating glass | | |
| Backsheet | TPT (Tedlar-PET-Tedlar) / BBF | | |
| Encapsulant | EVA (ethylene vinyl acetate) | | |
| Frame | Double-layer anodized aluminium alloy | | |
| Diodes | 6 (3 x 2 in parallel) serviceable Bypass Diodes | | |
| Junction Box | IP65 rated | | |
| Connectors | MC4 or compatible connectors | | |
| Cables | Length: 1200 mm / Section: 4.0 mm² | | |
| Dimensions | 1958 × 994 × 50 mm / 77.09 x 39.13 x 1.97 in | | |
| Weight | 28.3 kg / 62.4 lbs | | |
| Max. Load | Wind Load: 2400 Pa / Snow Load: 5400 Pa | | |

LDK Solar reserves the right to make specifications changes without any prior notice.

| Partner | | |
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