LDK240 WATT SERIES MODULES

LDK ENDURANCE
200P/210P/220P/230P/240P
60-CELL POLYCRYSTALLINE

COST EFFECTIVE POLYCRYSTALLINE MODULES

LDK' s Endurance Series of polycrystalline modules deliver the most reliable solar power and are ideal for large-scale deployment in the most challenging conditions of utility, residential and commercial installations.

MODULE BENEFITS

- High Efficiency: Polycrystalline solar cells with high transmission and textured glass delivering a module series efficiency up to 14.70%.
- Power tolerances of +/-3% minimizing PV system mismatch losses and ensure a stable high-energy output and a quick return on investments.
- High Quality: Modules are independently tested to ensure conformance with certification and regulatory standards.
- Rigorous quality control is applied throughout the production process from poly-silicon production to module.
- Durable: Tempered glass, EVA lamination, anodized aluminium frame and weatherproof backsheet provide long-life and enhanced cell performance.
- Ease of Installation: The comparatively low weight of the Endurance series allows for quick and easy installation.
- Reliable: 25-year limited warranty on power output.

WARRANTIES

- 5 years for product defects in materials & workmanship
- 12 years for 90% of warranted min. power
- 25 years for 80% of warranted min. power

QUALIFICATIONS AND CERTIFICATES

- Certified to IEC 61215:2005 [TÜV]
- Safety tested to EN 61730-1:2007, EN 61730-2:2007 [TÜV]
- UL 1703 [ETL]
- CE Mark
- Manufacturing facility certified to ISO9001 Quality Management System standards

LDK SOLAR

LDK Solar is the leading vertically integrated solar energy player in the industry. Today LDK Solar manufactures polysilicon, ingots, wafers, cells and modules as well as providing support customers PV projects development activities in selected markets. Today LDK Solar is the largest wafer manufacturer and supplier in the world and LDK Solar 15,000 MT 11N polysilicon plant is the largest in its kind.

ELECTRICAL CHARACTERISTICS (STC*)

TYPE	LDK-200P-20	LDK-210P-20	LDK-220P-20	LDK-230P-20	LDK-240P-20
Nominal Output (Pmax)	200 W	210 W	220 W	230 W	240 W
Warranted Minimum Power	194 W	203,7 W	213,4 W	223,1 W	232,8 W
Max Power Tolerance	±3 %	±3 %	±3 %	±3 %	±3 %
Voltage at Pmax (Vmp)	29,6 V	29,7 V	29,8 V	29,9 V	30 V
Current at Pmax (Imp)	6,75 A	7,07 A	7,4 A	7,68 A	7,98 A
Open Circuit Voltage (Voc)	36 V	36,1 V	36,5 V	36,8 V	36,9 V
Short Circuit Current (Isc)	7,82 A	7,83 A	8,14 A	8,34 A	8,35 A
Maximum System Voltage	1000 V	1000 V	1000 V	1000 V	1000 V
Cell Efficiency	14,12 %	14,83 %	15,53 %	16,24 %	16,94 %
Module Efficiency	12,25 %	12,87 %	13,48 %	14,09 %	14,70 %

STC* (Standard Test Conditions): Irradiance 1000W/m², Module Temperature 25°C, Air Mass 1,5

TEMPERATURE CHARACTERISTICS

TYPE	LDK-200P/210P/220P/230P/240P
NOCT**	45±2 °C
Temperature Coefficient of Pmax	-0,45 % / °C
Temperature Coefficient of Voc	-(0,34±0,01) % / °C
Temperature Coefficient of Isc	0,065 % / °C
Operating Temperature [°C]	-40 to +85 °C

NOCT**: Nominal Operation Cell Temperature Sun 800W/m²; Air 20°C; wind speed 1m/s

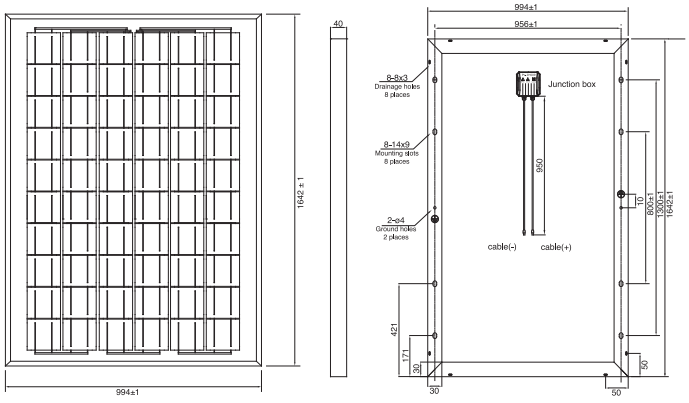
MECHANICAL CHARACTERISTICS

TYPE	LDK-200P/210P/220P/230P/240P
Dimensions	1642 x 994 x 40 mm
Weight	20 Kg
Junction Box	IP65 - 6 Bypass diodes serviceable
Type of Connector	MC4 or compatible connector
Solar Cells	60 (6x10) multi-crystalline cells 156 mm
Front Cover	3.2 mm thick, low iron tempered glass
Back Cover	TPT (Tedlar-PET-Tedlar)
Encapsulant	EVA
Frame	Anodized aluminium alloy, double wall
Max Load	2.400 pascals, front and back

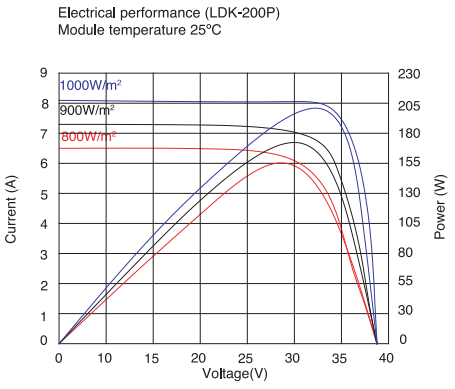
PACKING CONFIGURATION

TYPE	LDK-200P/210P/220P/230P/240P
Packing Configuration	2 pcs./box
Quantity/Pallet	24 pcs./pallet
Loading Capacity	40' HQ container: 26 pallets - 40' Std container: 13 pallets - 20' Std container: 6 pallets

DIMENSIONS



IV CURVE



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