

# 240P-245P-250P-255P-260P-265P- 270P-275P-280P-285P-290P-24



## WHY LDK SOLAR MODULES

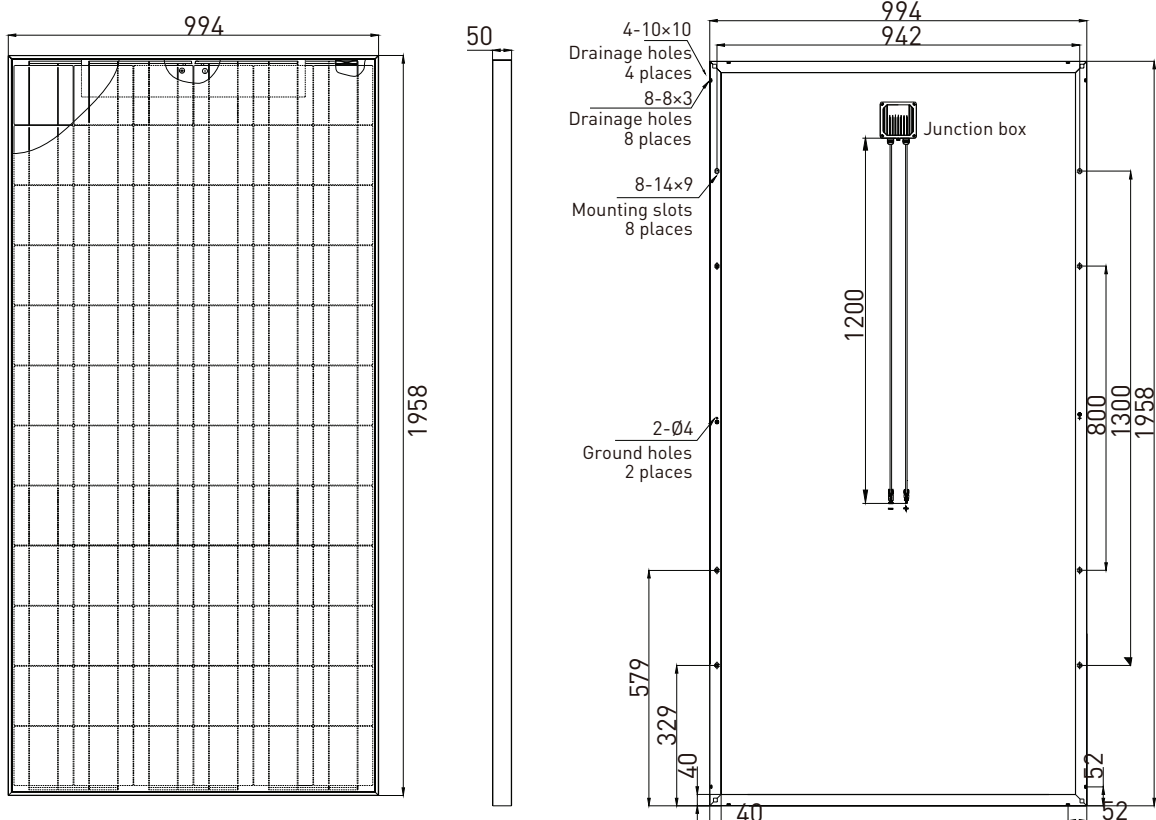
- Industry leading module power output warranty
- International quality, safety and performance certifications
- Modules manufactured in ISO 9001 certified factories
- High-reliability with guaranteed 0/+5 Wp peak power classification

## WARRANTIES

- 10 years for product defects in materials & workmanship
- 12 years for 90% of warranted minimum power
- 25 years for 80% of warranted minimum power

## 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
- ISO 9001:2008 Quality Management System
- CEC Listed: modules are eligible for California rebates
- PV CYCLE: voluntary module take back and recycling program
- MCS The Microgeneration Certification Scheme UK



# POLYCRYSTALLINE MODULES

## ELECTRICAL CHARACTERISTICS (STC\*)

TYPE	240P-24	245P-24	250P-24	255P-24	260P-24	265P-24	270P-24	275P-24	280P-24	285P-24	290P-24
Nominal Output (Pmax) [Wp]	240	245	250	255	260	265	270	275	280	285	290
Voltage at Pmax (Vmp) [V]	31.8	32.2	32.6	33.1	33.5	34.0	34.4	34.8	35.3	35.7	36.1
Current at Pmax (Imp) [A]	7.62	7.66	7.71	7.75	7.79	7.83	7.87	7.92	7.95	8.00	8.04
Open Circuit Voltage (Voc) [V]	42.6	42.9	43.1	43.3	43.6	43.8	44.1	44.3	44.6	44.8	45.1
Short Circuit Current (Isc) [A]	8.17	8.20	8.24	8.27	8.31	8.34	8.37	8.41	8.44	8.48	8.51
Power Classification Range [Wp]	-0/+4.99	-0/+4.99	-0/+4.99	-0/+4.99	-0/+4.99	-0/+4.99	-0/+4.99	-0/+4.99	-0/+4.99	-0/+4.99	-0/+4.99
Tolerance on Nominal Output [%]	+/-3	+/-3	+/-3	+/-3	+/-3	+/-3	+/-3	+/-3	+/-3	+/-3	+/-3
Maximum System Voltage	IEC EN: 1000 V / UL: 600 V										
Cell Efficiency [%]	13.70	13.98	14.27	14.55	14.84	15.12	15.41	15.69	15.98	16.27	16.55
Module Efficiency [%]	12.33	12.59	12.84	13.10	13.36	13.62	13.87	14.13	14.39	14.65	14.91

STC\* (Standard Test Conditions): Irradiance 1000 W/m<sup>2</sup>, Module Temperature 25 °C, Air Mass 1.5

## ELECTRICAL PERFORMANCE AT NOCT

TYPE	240P-24	245P-24	250P-24	255P-24	260P-24	265P-24	270P-24	275P-24	280P-24	285P-24	290P-24
Nominal Output (Pmax) [Wp]	175	178	182	186	189	193	197	200	204	207	211
Voltage at Pmax (Vmp) [V]	28.7	29.2	29.6	30.0	30.5	30.9	31.3	31.6	32.1	32.4	32.8
Current at Pmax (Imp) [A]	6.10	6.13	6.15	6.20	6.23	6.26	6.30	6.34	6.36	6.40	6.43
Open Circuit Voltage (Voc) [V]	39.4	39.7	39.9	40.0	40.3	40.5	40.8	41.0	41.3	41.4	41.7
Short Circuit Current (Isc) [A]	6.61	6.64	6.67	6.70	6.73	6.75	6.78	6.81	6.83	6.87	6.89

NOCT: Irradiance 800 W/m<sup>2</sup>, Module Temperature 45 +/- 2 °C, Air Mass 1.5

## 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

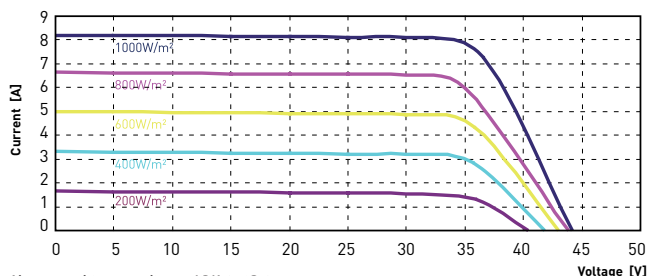
NOCT\*\* (Nominal Operating Cell Temperature): irradiance 800 W/m<sup>2</sup>, Air 20 °C, wind speed 1 m/s

## MECHANICAL CHARACTERISTICS

TYPE	LDK-P-24 Series
Solar Cells	72 (6 x 12) polycrystalline silicon solar cells 156 x 156 mm
Front Glass	3.2 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: 1000 mm / Section: 4.0 mm <sup>2</sup>
Dimensions	1958 x 994 x 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

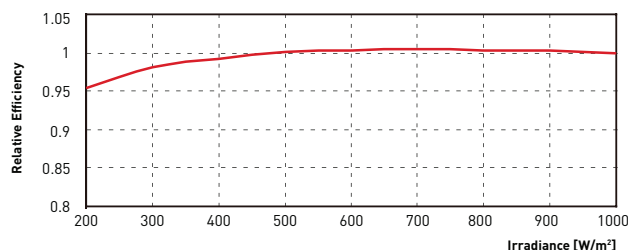
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## I-V CURVE AT DIFFERENT IRRADIANCE LEVELS



Above graphics according to LDK-270P-24

## PERFORMANCE AT LOW IRRADIANCE



The typical relative change in module efficiency at an irradiance of 200W/m<sup>2</sup> in relation to 1000W/m<sup>2</sup> (both at 25 °C and AM 1.5 spectrum) is less than 6%

## 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)