

# POLYCRYSTALLINE MODULES LDK-270P-275P-280P-24

ONTARIO DOMESTIC CONTENT COMPLIANT



## 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

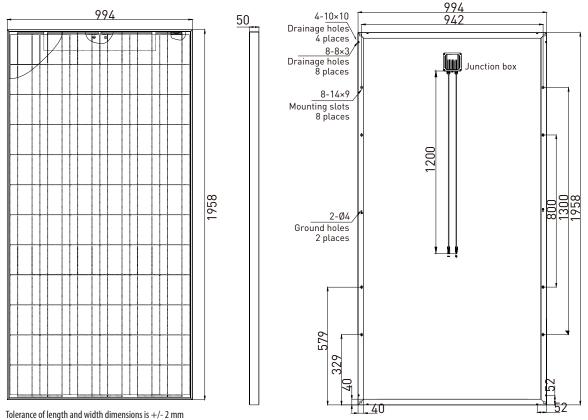
## WARRANTIES

- 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





#### **ELECTRICAL CHARACTERISTICS (STC\*)**

ТҮРЕ	270P-24	275P-24	280P-24
Nominal Output (Pmax) [Wp]	270	275	280
Voltage at Pmax (Vmp) [V]	34.4	34.8	35.3
Current at Pmax (Imp) [A]	7.87	7.92	7.95
Open Circuit Voltage (Voc) [V]	44.1	44.3	44.6
Short Circuit Current (Isc) [A]	8.37	8.41	8.44
Power Classification Range [Wp]	-0/+4.99	-0/+4.99	-0/+4.99
Tolerance on Nominal Output [%]	+/-3	+/-3	+/-3
Maximum System Voltage	IEC EN: 1000 V / UL: 600 V		
Cell Efficiency [%]	15.41	15.69	15.98
Module Efficiency [%]	13.87	14.13	14.39

STC\* (Standard Test Conditions): Irradiance 1000 W/m², Module Temperature 25 °C, Air Mass 1.5

#### **ELECTRICAL PERFORMANCE AT NOCT**

ТҮРЕ	270P-24	275P-24	280P-24
Nominal Output (Pmax) [Wp]	197	200	204
Voltage at Pmax (Vmp) [V]	31.3	31.6	32.1
Current at Pmax (Imp) [A]	6.30	6.34	6.36
Open Circuit Voltage (Voc) [V]	40.8	41.0	41.3
Short Circuit Current (Isc) [A]	6.78	6.81	6.83

NOCT: Irradiance 800 W/m², Module Temperature 45 +/- 2 °C, Air Mass 1.5

#### **TEMPERATURE CHARACTERISTICS**

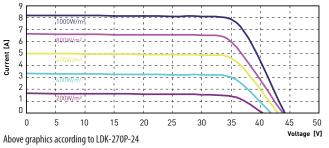
ТҮРЕ	LDK-P-24 Series
NOCT**	45 +/-2 °C
Temperature Coefficient of Pmax	-0.45 %/°C
Temperature Coefficient of Voc	-0.33 %/°C
Temperature Coefficient of Isc	0.06 %/°C
Maximum Series Fuse Rating	20 A
Operating Temperature	from -40 to +85 °C
Storage Temperature	from -40 to +60 °C

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

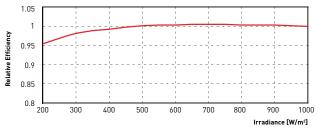
#### **MECHANICAL CHARACTERISTICS**

ΤΥΡΕ	LDK-P-24 Series
Solar Cells	72 (6x12) polycrystalline silicon solar cells 156 x 156 mm
Front Glass	4 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 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

#### **I-V CURVE AT DIFFERENT IRRADIANCE LEVELS**



#### **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**

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

LDK Solar reserves the right to make specifications changes without any prior notice. This data sheet complies with the EN 50380 requirements. V1 - February 2012 - 🖾 LDK Solar Limited. All rights reserved. E.&O.E.

