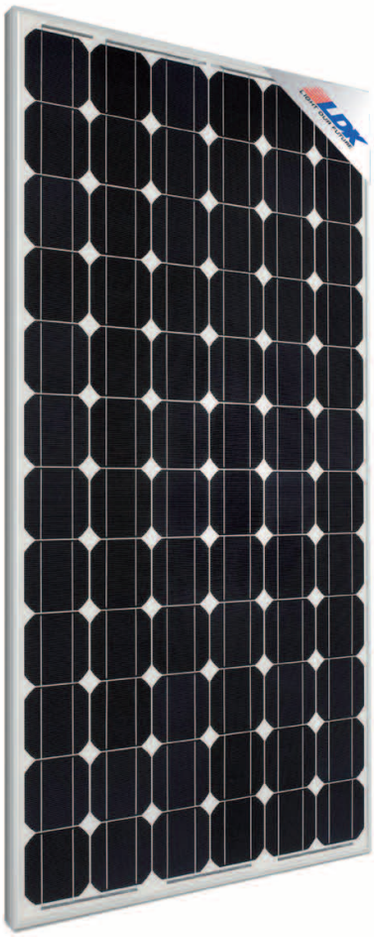
180D-185D-190D-195D-200D-24(s)



WHY LDK SOLAR MODULES

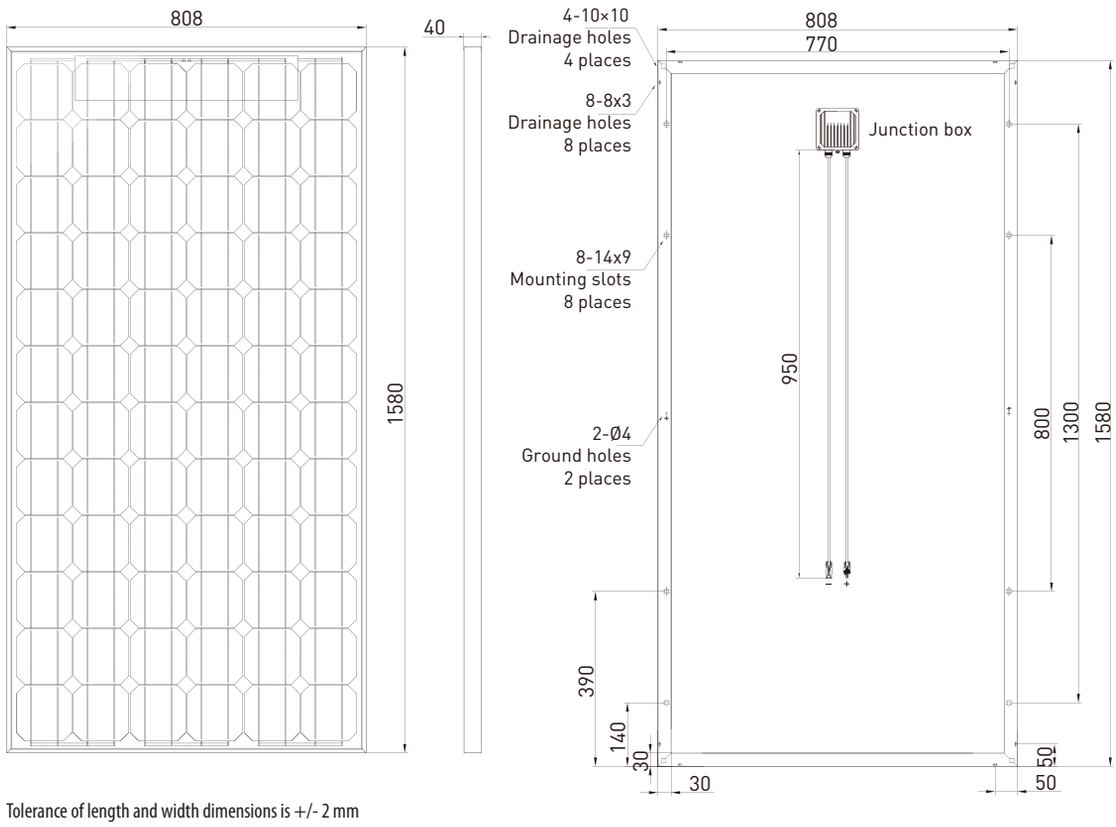
- Industry leading module power output warranty
- International quality, safety and performance certifications
- Modules manufactured in ISO 9001 certified factories
- High-reliability with guaranteed 0/+5 Wp peak power classification

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



Tolerance of length and width dimensions is +/- 2 mm

MONOCRYSTALLINE MODULES

ELECTRICAL CHARACTERISTICS (STC*)

TYPE	180D-24(s)	185D-24(s)	190D-24(s)	195D-24(s)	200D-24(s)
Nominal Output (Pmax) [Wp]	180	185	190	195	200
Voltage at Pmax (Vmp) [V]	36.2	36.9	37.7	37.9	38.1
Current at Pmax (Imp) [A]	4.98	5.02	5.05	5.16	5.27
Open Circuit Voltage (Voc) [V]	44.9	45.1	45.2	45.3	45.4
Short Circuit Current (Isc) [A]	5.46	5.48	5.51	5.54	5.57
The power tolerance is +/- 3% referred to the Nominal Output					
Maximum System Voltage	IEC: 1000 V / UL: 600 V				
Cell Efficiency [%]	17.28	17.77	18.25	18.73	19.21
Module Efficiency [%]	14.10	14.49	14.88	15.27	15.67

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

ELECTRICAL PERFORMANCE AT NOCT

TYPE	180D-24(s)	185D-24(s)	190D-24(s)	195D-24(s)	200D-24(s)
Nominal Output (Pmax) [W]	130	134	138	142	146
Voltage at Pmax (Vmp) [V]	32.8	33.6	34.6	35.5	36.4
Current at Pmax (Imp) [A]	3.96	3.98	3.99	4.01	4.03
Open Circuit Voltage (Voc) [V]	41.3	41.5	41.6	41.8	42
Short Circuit Current (Isc) [A]	4.42	4.44	4.46	4.48	4.50

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

TEMPERATURE CHARACTERISTICS

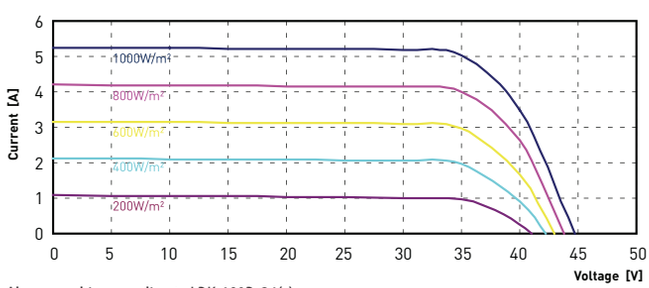
TYPE	LDK-D-24(s) Series
NOCT**	45 +/- 2 °C
Temperature Coefficient of Pmax	-0.47 %/°C
Temperature Coefficient of Voc	-0.34 %/°C
Temperature Coefficient of Isc	0.06 %/°C
Maximum Series Fuse Rating	20 A
Operating Temperature	from -40 to +85 °C
Storage Temperature	from -40 to +60 °C

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

MECHANICAL CHARACTERISTICS

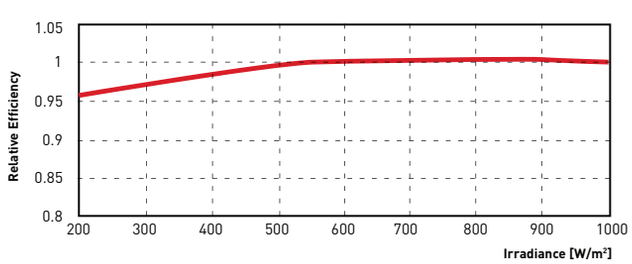
TYPE	LDK-D-24(s) Series
Solar Cells	72 (6x12) monocrystalline silicon solar cells 125 x 125 mm
Front Cover	3.2 mm thick, tempered glass / AR coating glass
Back Cover	TPT (Tedlar-PET-Tedlar) / BBF
Encapsulant	EVA (ethylene vinyl acetate)
Frame	Double-layer anodized aluminium alloy
Diodes	6 Bypass diodes serviceable
Junction Box	IP65 rated
Connectors	MC4 or compatible connectors
Cables	Lentgh: 950 mm / Section: 4.0 mm²
Dimensions	1580 x 808 x 40 mm / 62.2 x 31.8 x 1.6 in
Weight	15.6 kg / 34.4 lbs
Max. Load	Wind Load: 2400 Pa / Snow Load: 5400 Pa

I-V CURVE AT DIFFERENT IRRADIANCE LEVELS



Above graphics according to LDK-180D-24(s)

PERFORMANCE AT LOW IRRADIANCE



The typical relative change in module efficiency at an irradiance of 200 W/m² in relation to 1000 W/m² (both at 25 °C and AM 1.5 spectrum) is less than 6%

PACKING CONFIGURATION

TYPE	LDK-D-24(s) Series
Packing Configuration	25 pcs. / box
Quantity / Pallet	50 pcs. / pallet
Loading Capacity	700 pcs. / 40 ft (High Cube Container)