

LDK 220-195

48-cell Monocrystalline PV Module Series



QUALITY & EFFICIENCY BENEFITS

Up to 19%
Cell efficiency

Highest performance enabled by the latest LDK Solar Wafer Technology

15 kg

The lower weight design reduces the total system load on a roof, making it ideal for residential customers. Its shape allows for better roof utilization. Its low weight means easier handling for installers.

PID
Resistance

Modules are designed to withstand PID (Potential Induced Degradation)*

+2%
Light transmission

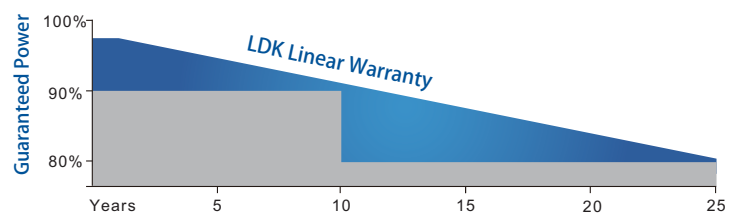
High light transmission Anti-Reflective Glass with improved self-cleaning capability

0/+5W
Positive tolerance

Positive power tolerance for reliable power output

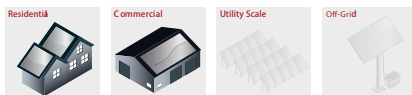
* PID test conditions : voltage of -1000V applied during 48 hours at 60±2°C, 85±5%RH

WARRANTY BENEFITS



LDK Solar offer 10 years product warranty and 25 years linear warranty

APPLICATION RECOMMENDATION



QUALITY & ENVIRONMENTAL CERTIFICATES

ISO 9001 Quality Standards • ISO 14001 Environmental Standards • OHSAS 18001 Occupational Health & Safety Standards



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ELECTRICAL CHARACTERISTICS (STC*)

Module Type	LDK	220 MC	215 MC	210 MC	205 MC	200 MC	195 MC
Nominal Power (Pmax)	[W]	220	215	210	205	200	195
Minimum Power Output	[W]	220	215	210	205	200	195
Voltage at Pmax (Vmp)	[V]	25.7	25.5	25.3	24.9	24.5	24.1
Current at Pmax (Imp)	[A]	8.56	8.43	8.30	8.23	8.16	8.10
Open Circuit Voltage (Voc)	[V]	31.2	30.9	30.5	30.2	29.9	29.6
Short Circuit Current (Isc)	[A]	9.11	9.05	8.98	8.92	8.85	8.78
Tolerance on Nominal Power	[W]	-0/+5	-0/+5	-0/+5	-0/+5	-0/+5	-0/+5
Maximum System Voltage	[V]	IEC EN / UL: 1000 V					
Cell Efficiency	[%]	19.18	18.75	18.31	17.87	17.44	17.00
Module Efficiency	[%]	16.90	16.52	16.13	15.75	15.37	14.98

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

ELECTRICAL CHARACTERISTICS AT NOCT **

Module Type	LDK	220 MC	215 MC	210 MC	205 MC	200 MC	195 MC
Output Power (Pmax)	[W]	159	156	152	149	145	142
Voltage at Pmax (Vmp)	[V]	24.0	23.8	23.6	23.2	22.8	22.5
Current at Pmax (Imp)	[A]	6.66	6.56	6.46	6.40	6.35	6.31
Open Circuit Voltage (Voc)	[V]	29.1	28.8	28.4	28.1	27.9	27.7
Short Circuit Current (Isc)	[A]	7.38	7.33	7.27	7.22	7.16	7.11

NOCT** (Nominal Operating Cell Temperature): Irradiance 800 W/m², Ambient Temperature 20 °C, Wind speed 1 m/s
Best in Class AAA solar simulator (IEC 60904-9) is used, with power measurement uncertainty within ±3%

TEMPERATURE CHARACTERISTICS

NOCT	45 ± 2 °C
Pmax Temperature Coefficient (γ)	- 0.47 %/°C
Voc Temperature Coefficient (β)	- 0.34 %/°C
Isc Temperature Coefficient (α)	0.06 %/°C
Series Fuse Maximum Rating	15 A
Operating Temperature	From - 40 to +85 °C
Storage Temperature	From - 40 to +60 °C

MECHANICAL CHARACTERISTICS

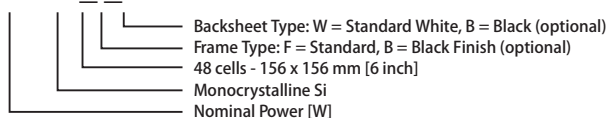
Solar Cells	48 (6x8) monocrystalline silicon - 156 x 156 mm [6 inch] solar cells
Front Glass	3.2 mm [0.13 in] high-transparency AR-coated tempered glass
Back Cover	White or Black (optional) Backsheet
Encapsulant	EVA (Ethylene-Vinyl Acetate)
Frame	Anodized aluminium alloy
Junction Box	Submarine IP67 rated, with serviceable bypass diodes
Cables	UV resistant solar cable, 900 mm [35.43 in] - section 4.0 mm ² [12 AWG]
Connectors	MC4 compatible connectors
Dimensions	1320 x 986 x 35 mm [51.97 x 38.82 x 1.38 in]
Weight	15 kg [33.1 lbs]
Max. Load	Wind Load: 2400 Pa / Snow Load: 5400 Pa

PACKING CONFIGURATION

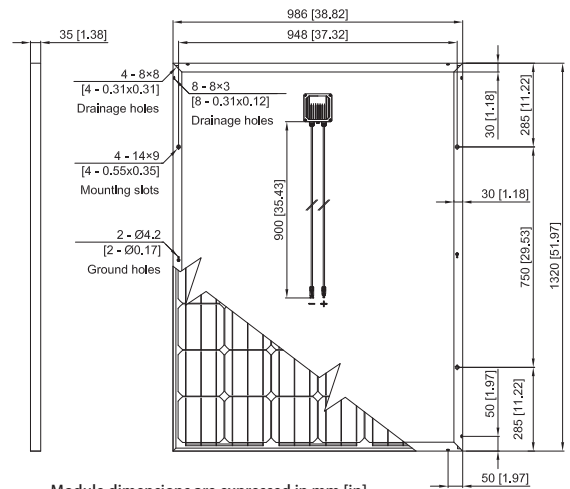
Quantity / Pallet	30 pcs/pallet	50 pcs/pallet
Pallet / Container	32 Pallets/Container	8 pallets/container
Loading Capacity	960 pcs./40 ft High Cube Container	400 pcs./20 ft Normal Container

MODULE TYPE CODING RULE

LDK xxx MC

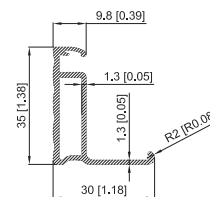


DIMENSIONS

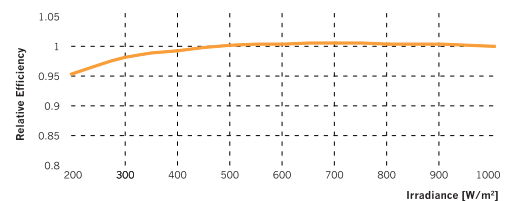


Module dimensions are expressed in mm [in] with tolerance ±2 mm [±0.079 in]

NEW FRAME CROSS SECTION

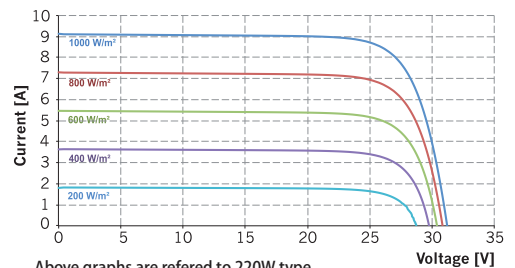


PERFORMANCE AT LOW IRRADIANCE



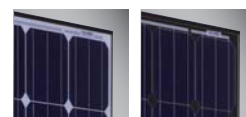
The typical relative change in module efficiency at an irradiance of 200 W/m² in relation to 1000 W/m² (both at 25 °C and spectrum AM 1.5) is less than 5%

I-V CURVE AT DIFFERENT IRRADIANCE LEVELS



Above graphs are referred to 220W type

PRODUCT OPTIONS



Black frame Full black