



# KD 200-60 P Series

KD230GX-LPB    KD235GX-LPB    KD240GX-LPB    KD245GX-LPB

## CUTTING EDGE TECHNOLOGY

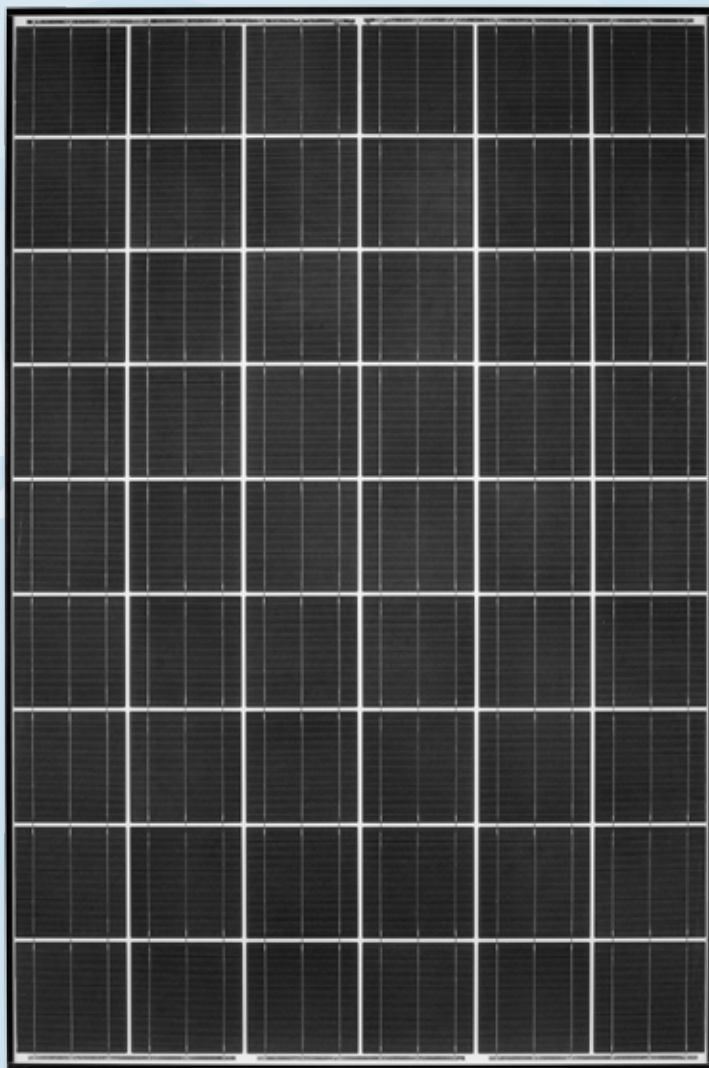
As a pioneer with over 35 years in the solar energy industry, Kyocera demonstrates leadership in the development of solar energy products. Kyocera's *Kaizen* Philosophy, commitment to continuous improvement, is shown by repeatedly achieving world record cell efficiencies.

## QUALITY BUILT IN

- UV stabilized, aesthetically pleasing black anodized frame
- Supported by major mounting structure manufacturers
- Easily accessible grounding points on all four corners for fast installation
- Proven junction box technology with 12 AWG PV wire to work with transformerless inverters
- Quality locking MC4 plug-in connectors to provide safe and quick connections

## RELIABLE

- Proven superior field performance
- Tight power tolerance
- Only module to pass rigorous long-term testing performed by TÜV Rheinland



## WARRANTY

- Kyocera standard 25 year power output warranty and 5 year workmanship warranty applies in USA
- Extended warranties available per project requirements
- Kyocera standard 25 year power output warranty and 2 year workmanship warranty applies outside of USA
- Refer to Kyocera warranty policy for details

UL Listing  
QIGU.E173074



Registered to ISO9001-2000

NEC 2008 Compliant, UL 1703, ISO 9001, and ISO 14001  
UL1703 Certified and Registered, UL Fire Safety Class C, CEC, FSEC  
Certified IEC61215 Ed 2 IEC61730 by JET



**QUALIFIED FOR "BUY AMERICAN"**  
Manufactured in San Diego, California

## ELECTRICAL SPECIFICATIONS

### Standard Test Conditions (STC)

STC = 1000 W/M<sup>2</sup> irradiance, 25°C module temperature, AM 1.5 spectrum

	KD230GX-LPB	KD235GX-LPB	KD240GX-LPB	KD245GX-LPB	
$P_{mp}^2$	230	235	240	245	W
$V_{mp}$	29.8	29.8	29.8	29.8	V
$I_{mp}$	7.72	7.89	8.06	8.23	A
$V_{oc}$	36.9	36.9	36.9	36.9	V
$I_{sc}$	8.36	8.55	8.59	8.91	A
$P_{tolerance}$	+5/-3	+5/-3	+5/-3	+5/-3	%

### Nominal Operating Cell Temperature Conditions (NOCT)

NOCT = 800 W/M<sup>2</sup> irradiance, 20°C ambient temperature, AM 1.5 spectrum

$T_{NOCT}$	45	45	45	45	°C
$P_{max}$	165	169	172	176	W
$V_{mp}$	26.8	26.8	26.7	26.8	V
$I_{mp}$	6.18	6.31	6.45	6.58	A
$V_{oc}$	33.7	33.7	33.7	33.7	V
$I_{sc}$	6.77	6.92	6.95	7.21	A
PTC	208.0	212.6	217.3	219.1	W

### Temperature Coefficients

$P_{max}$	-1.04	-1.07	-1.10	-1.12	W/°C
$V_{mp}$	-0.153	-0.154	-0.154	-0.155	V/°C
$I_{mp}$	0.000502	0.000513	0.000515	0.000535	A/°C
$V_{oc}$	-0.133	-0.133	-0.133	-0.133	V/°C
$I_{sc}$	0.00502	0.00513	0.00515	0.00535	A/°C
Operating Temp	-40 to +90	-40 to +90	-40 to +90	-40 to +90	°C

### System Design

Series Fuse Rating	15 A
Maximum DC System Voltage (UL)	600 V
Hail Stone Impact	1 in (25mm) @ 51mph (23m/s)

NEC 2008 COMPLIANT

UL 1703 LISTED



Registered to ISO9001-2000

CERTIFIED IEC61215 ED2 IEC61730 BY JET

KYOCERA reserves the right to modify these specifications without notice.

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WARNING: Read the instruction manual in its entirety before handling, installing, and operating Kyocera Solar modules.

## MODULE CHARACTERISTICS

Dimensions: 65.43in/38.98in/1.8in  
length/width/height  
(1662mm/990mm/46mm)

Weight: 46.3lbs (21.0kg)

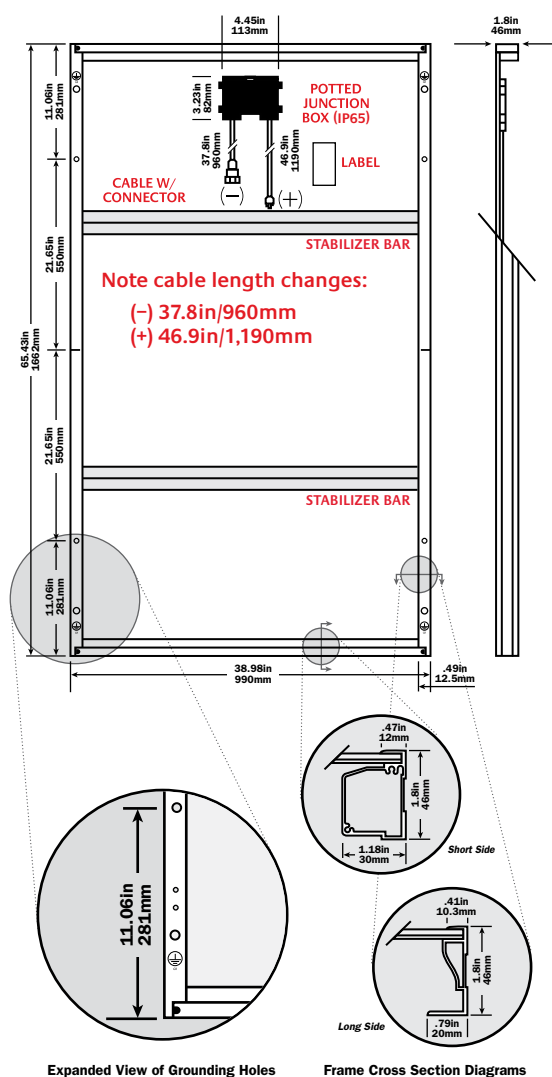
## PACKAGING SPECIFICATIONS

Modules per pallet: 20

Pallets per 53' container: 36

Pallet box dimensions: 66.54in/39.76in/47.24in  
length/width/height  
(1690mm/1010mm/1200mm)

Pallet box weight: 1102.5lbs (500kg)



Expanded View of Grounding Holes

Frame Cross Section Diagrams

### Legend

○ MOUNTING HOLES .35in (9mm) ■ DRAINAGE HOLES ⊕ GROUND SYMBOL .35in (9mm)

OUR VALUED PARTNER