

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 manufacturer to pass rigorous long-term testing performed by TÜV Rheinland

WARRANTY

- Kyocera standard 20 year power output warranty and 5 year workmanship warranty applies in USA
- Extended warranties available per project requirements
- Kyocera standard 20 year power output warranty and 2 year workmanship warranty applies outside of USA
- Refer to Kyocera warranty policy for details

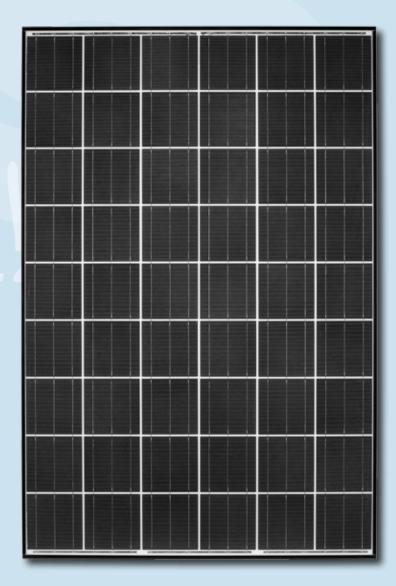
KD 200-60 P Series

KD230GX-LPB

KD235GX-LPB

KD240GX-LPB

KD245GX-LPB



QUALIFICATIONS AND CERTIFICATIONS

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



Available Upon Request

ELECTRICAL SPECIFICATIONS

Standard Test Conditions (STC) STC = 1000 W/M² irradiance, 25°C module temperature, AM 1.5 spectrum*

| | KD230GX-LPB | KD235GX-LPB | KD240GX-LPB | KD245GX-LPB | |
|------------------------|-------------|-------------|-------------|-------------|---|
| \mathbf{P}_{mp} | 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 | Α |
| V_{oc} | 36.9 | 36.9 | 36.9 | 36.9 | V |
| I _{sc} | 8.36 | 8.55 | 8.59 | 8.91 | Α |
| P _{tolerance} | +5/-3 | +5/-3 | +5/-3 | +5/-3 | % |

| Nominal Operating Cell Temperature Conditions (NOCT) NOCT = 800 W/M² 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 | Α |
| V _{oc} | 33.7 | 33.7 | 33.7 | 33.7 | V |
| l _{sc} | 6.77 | 6.92 | 6.95 | 7.21 | Α |
| PTC | 208.0 | 212.6 | 217.3 | 219.1 | W |
| Temperature Coefficients | | | | | |

| | 200.0 | 212.0 | 211.5 | 213.1 | VV |
|------------------------|------------------|------------|------------|------------|------|
| Temperati | ure Coefficients | 5 | | | |
| P _{max} | -0.45 | -0.46 | -0.46 | -0.46 | %/°C |
| V_{mp} | -0.51 | -0.52 | -0.52 | -0.52 | %/°C |
| I _{mp} | 0.0065 | 0.0065 | 0.0064 | 0.0065 | %/°C |
| V _{oc} | -0.36 | -0.36 | -0.36 | -0.36 | %/°C |
| I _{sc} | 0.060 | 0.060 | 0.060 | 0.060 | %/°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 |
| Hailstone Impact | 1in (25mm) @ 51mph (23m/s) |

Subject to simulator measurement uncertainty of +/- 3%.
 KYOCERA reserves the right to modify these specifications without notice.

NEC 2008 COMPLIANT UL 1703 LISTED









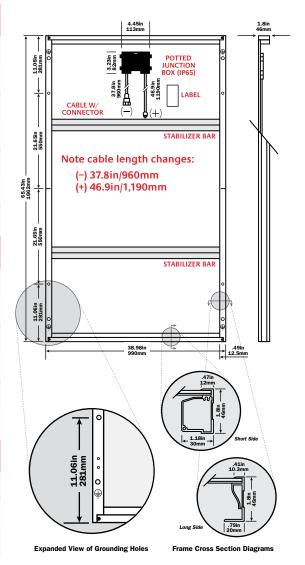


MODULE CHARACTERISTICS

| 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: length/width/height | 66.54in/39.76in/47.24in (1690mm/1010mm/1200mm) |
| Pallet box weight: | 1050 lbs (480kg) |



Legend O MOUNTING HOLES ■ DRAINAGE HOLES ■ GROUND SYMBOL .35in (9mm)

OUR VALUED PARTNER 081211