



KD 135 F Series

KD135GX-LFBS KD140GX-LFBS

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

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



ELECTRICAL SPECIFICATIONS

Standard Test Conditions (STC)

STC = 1000 W/M² irradiance, 25°C module temperature, AM 1.5 spectrum*

	KD135GX-LFBS	KD140GX-LFBS	
P _{mp}	135	140	W
V _{mp}	17.7	17.7	V
I _{mp}	7.63	7.91	A
V _{oc}	22.1	22.1	V
I _{sc}	8.37	8.68	A
P _{tolerance}	+5/-5	+5/-5	%

Nominal Operating Cell Temperature Conditions (NOCT)

NOCT = 800 W/M² irradiance, 20°C ambient temperature, AM 1.5 spectrum*

T _{NOCT}	45	45	°C
P _{max}	97	101	W
V _{mp}	16.0	16.0	V
I _{mp}	6.10	6.33	A
V _{oc}	20.2	20.2	V
I _{sc}	6.78	7.03	A
PTC	120.3	124.9	W

Temperature Coefficients

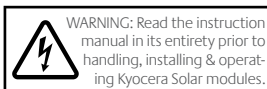
P _{max}	-0.45	-0.45	%/°C
V _{mp}	-0.52	-0.52	%/°C
I _{mp}	0.0066	0.0066	%/°C
V _{oc}	-0.36	-0.36	%/°C
I _{sc}	0.060	0.060	%/°C
Operating Temp	-40 to +90	-40 to +90	°C

System Design

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

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

NEC 2008 COMPLIANT
UL 1703 LISTED
CERTIFIED IEC61215 ED2 IEC61730 BY JET

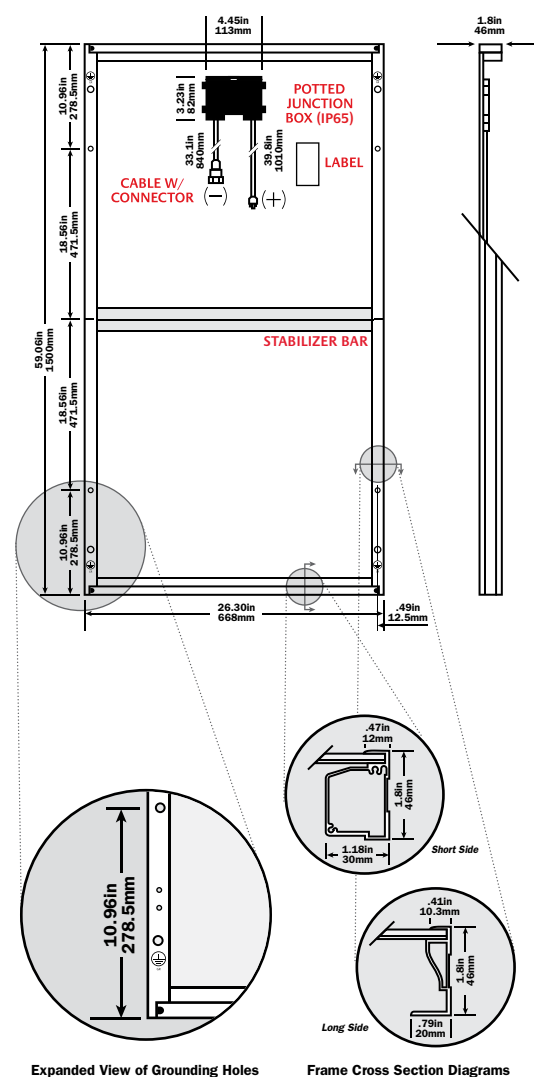


MODULE CHARACTERISTICS

Dimensions: length/width/height	59.06in/26.30in/1.8in (1500mm/668mm/46mm)
Weight:	28.4lbs (12.9kg)

PACKAGING SPECIFICATIONS

Modules per pallet:	20
Pallets per 53' container:	54
Pallet box dimensions: length/width/height	63.19in/27.56in/49.02in (1605mm/700mm/1245mm)
Pallet box weight:	650lbs (295kg)



Expanded View of Grounding Holes

Frame Cross Section Diagrams

Legend

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