



KD 135 F, SX Series

KD135SX-UFBS KD140SX-UFBS

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

RELIABLE

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

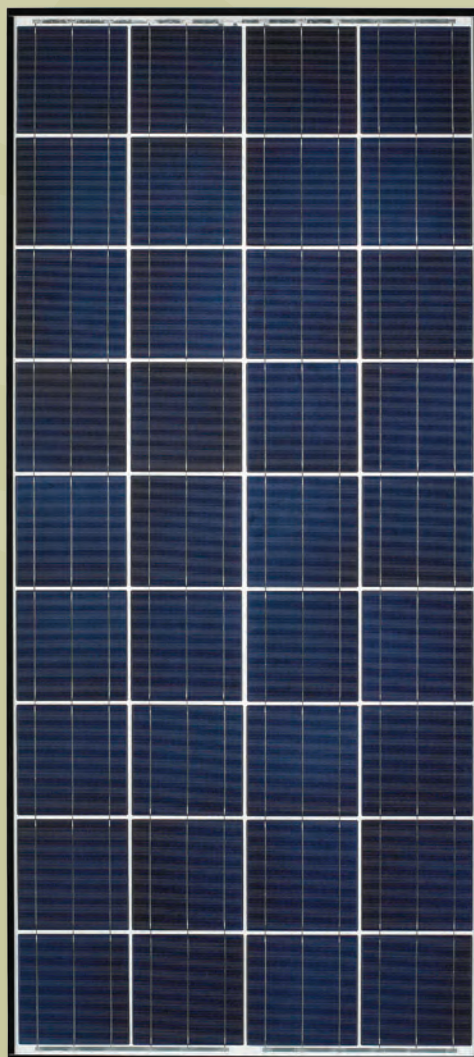
QUALIFICATIONS AND CERTIFICATIONS

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, Class I, Div II
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*

	KD135SX-UFBS	KD140SX-UFBS	
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

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
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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



WARNING: Read the instruction manual in its entirety prior to handling, installing & operating Kyocera Solar modules.

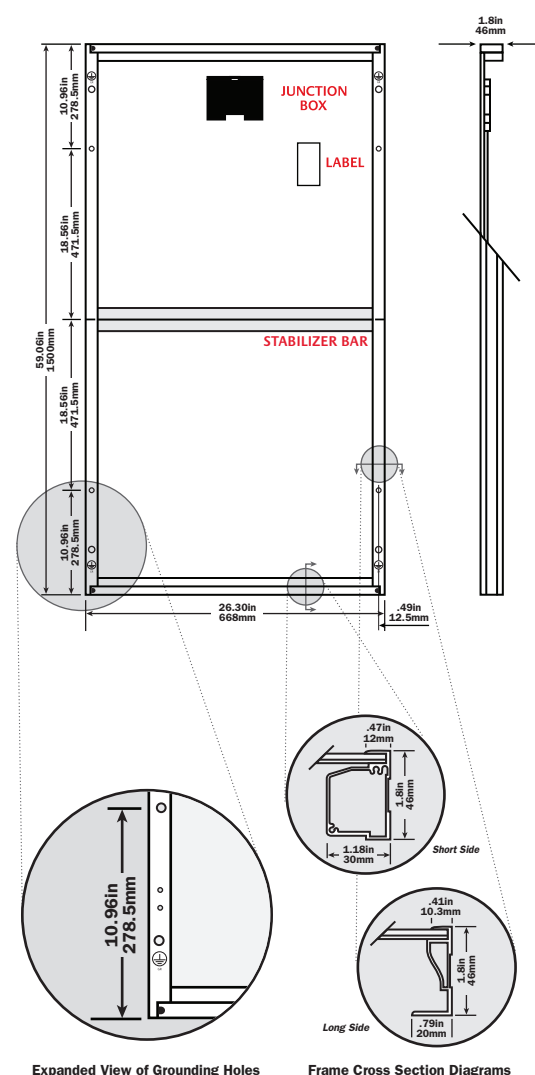
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MODULE CHARACTERISTICS

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)

OUR VALUED PARTNER