



KD 135 P, SX Series

KD135SX-UPU

KD140SX-UPU

CUTTING EDGE TECHNOLOGY

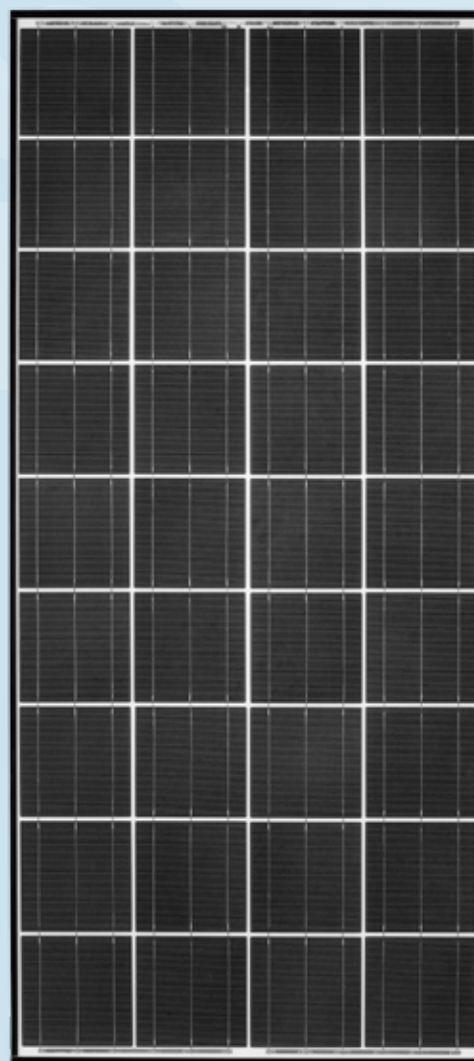
As a pioneer with over 35 years in the solar energy industry, Kyocera demonstrates leadership in the development of solar energy products. Kyocera's *Kaizen* Philosophy, commitment to continuous improvement, is shown by repeatedly achieving world record cell efficiencies.

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-UPU	KD140SX-UPU	
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

System Design

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

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

MODULE CHARACTERISTICS

Dimensions: 59.06in/26.30in/1.8in
 length/width/height

Weight: 27.6lbs (12.5kg)

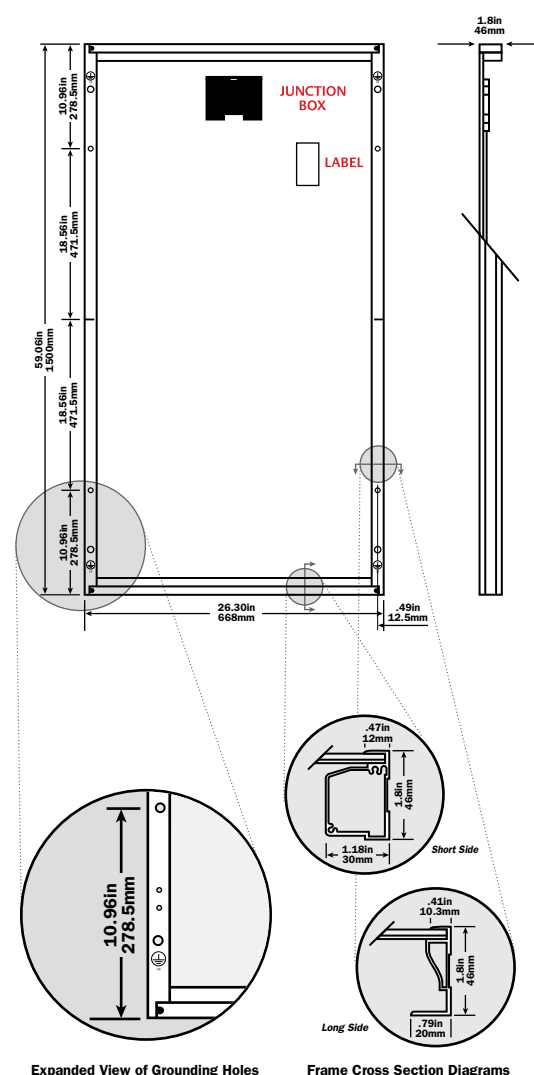
PACKAGING SPECIFICATIONS

Modules per pallet: 20

Pallets per 53' container: 54

Pallet box dimensions: 63.19in/27.56in/49.02in
 length/width/height

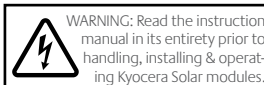
Pallet box weight: 617lbs (280kg)



Expanded View of Grounding Holes

Frame Cross Section Diagrams

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



Legend

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