



# 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/M<sup>2</sup> irradiance, 25°C module temperature, AM 1.5 spectrum\*

	KD135SX-UFBS	KD140SX-UFBS	
P <sub>mp</sub>	135	140	W
V <sub>mp</sub>	17.7	17.7	V
I <sub>mp</sub>	7.63	7.91	A
V <sub>oc</sub>	22.1	22.1	V
I <sub>sc</sub>	8.37	8.68	A
P <sub>tolerance</sub>	+5/-5	+5/-5	%

Nominal Operating Cell Temperature Conditions (NOCT)  
 NOCT = 800 W/M<sup>2</sup> irradiance, 20°C ambient temperature, AM 1.5 spectrum\*

T <sub>NOCT</sub>	45	45	°C
P <sub>max</sub>	97	101	W
V <sub>mp</sub>	16.0	16.0	V
I <sub>mp</sub>	6.10	6.33	A
V <sub>oc</sub>	20.2	20.2	V
I <sub>sc</sub>	6.78	7.03	A

### Temperature Coefficients

P <sub>max</sub>	-0.45	-0.45	%/°C
V <sub>mp</sub>	-0.52	-0.52	%/°C
I <sub>mp</sub>	0.0066	0.0066	%/°C
V <sub>oc</sub>	-0.36	-0.36	%/°C
I <sub>sc</sub>	0.060	0.060	%/°C

Operating Temp -40 to +90 -40 to +90 °C

### System Design

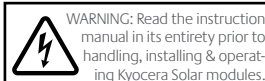
Series Fuse Rating 15 A

Maximum DC System Voltage (UL) 600 V

Hailstone Impact 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  
 CERTIFIED IEC61215 ED2 IEC61730 BY JET



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## MODULE CHARACTERISTICS

Dimensions: 59.06in/26.30in/1.8in  
 length/width/height (1500mm/668mm/46mm)

Weight: 28.4lbs (12.9kg)

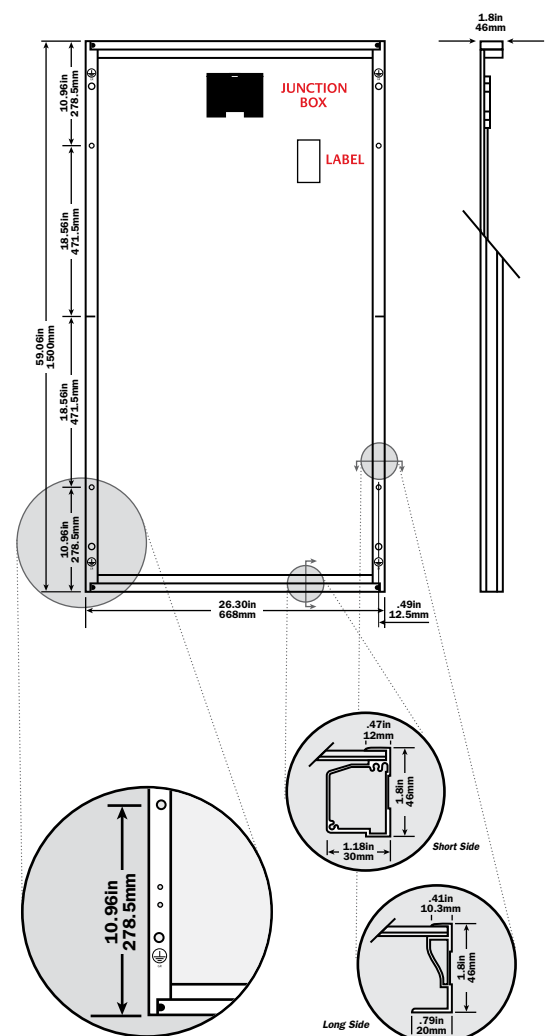
## PACKAGING SPECIFICATIONS

Modules per pallet: 20

Pallets per 53' container: 54

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