



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

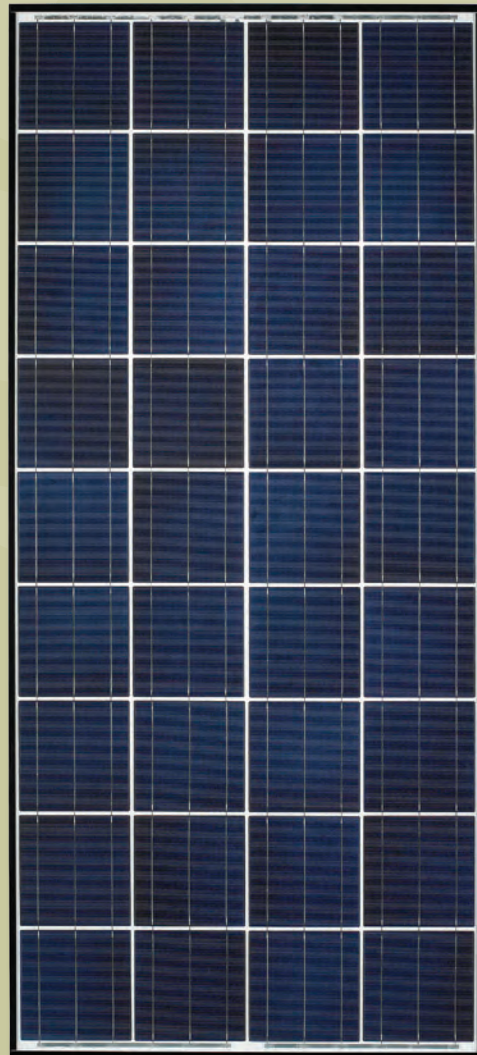
QUALIFICATIONS AND CERTIFICATIONS

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

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



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

MODULE CHARACTERISTICS

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

Weight: 28.4lbs (12.9kg)

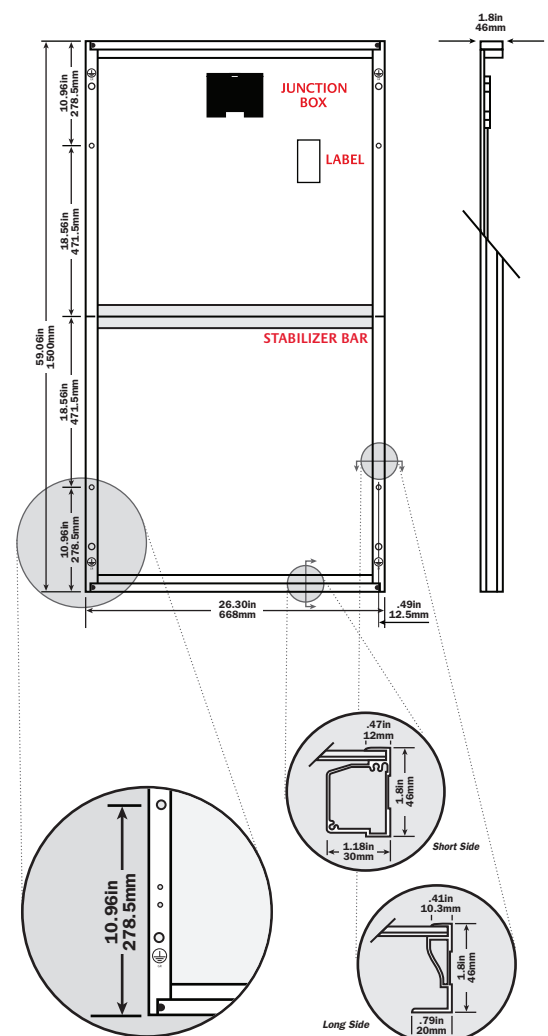
PACKAGING SPECIFICATIONS

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)