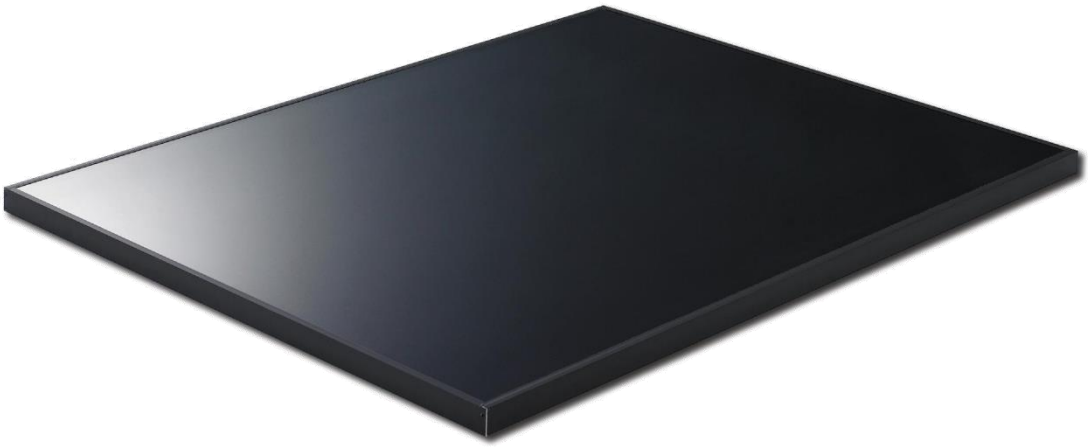
Product Data Sheet
SF175-S



Contact

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Certifications

IEC 61646 / IEC 61730(JET/TUV)

UL1703(UL)

ISO 9001

RoHS Compliant

Electrical Characteristics

Electrical Performance at Standard Test Conditions (STC) *1

Maximum Power (Pmax)	175 W
Tolerance of Pmax	+10% / - 5%
Open Circuit Voltage (Voc)	114 V
Short Circuit Current (Isc)	2.20 A
Maximum Power Voltage (Vmpp)	89.5 V
Maximum Power Current (Impp)	1.96 A

Note*1 Standard Test Conditions (STC) : 1,000 W/m² irradiance, cell temperature 25 ℃ and a spectral distribution of irradiance according to air mass 1.5. Isc and Voc are within ±10% tolerance of the rated values at STC.

Electrical Performance at Nominal Operating Cell Temperature (NOCT) Conditions*2

Maximum Power (Pmax)	130 W
Open Circuit Voltage (Voc)	104 V
Short Circuit Current (Isc)	1.76 A
Maximum Power Voltage (Vmpp)	83.9 V
Maximum Power Current (Impp)	1.55 A

Note*2 Nominal Operating Cell Temperature Conditions: Module operating temperature at 800 W/m² irradiance, ambient temperature 20 °C, wind speed 1m/s and open circuit condition.

Performance at Low Irradiance*3

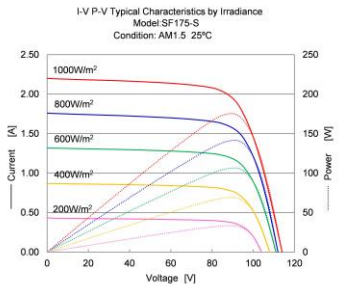
Note*3 Efficiency reduction of maximum power from an irradiance of 1,000 W/m² to 200 W/ m² at 25 °C is typically2.0%. The standard deviation for the reduction of efficiency is 1.9%.

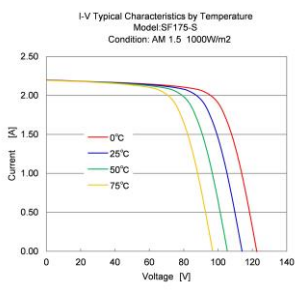
Characteristics for System Design

Maximum system Voltage (Vsys)	1,500 V IEC / 1,500 V UL
Limiting Reverse Current (Ir)	7 A
Maximum Series Fuse Rating (Isf)	4 A

Thermal Characteristics

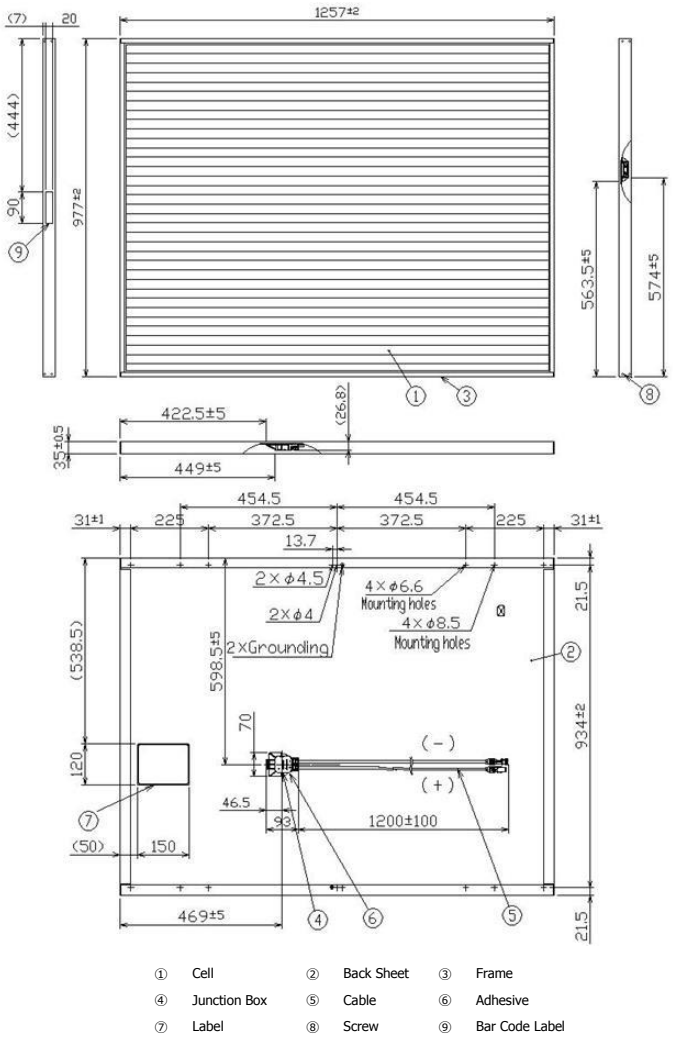
NOCT	47.0 °C
Temperature Coefficient of Isc (α)	+ 0.01% / K
Temperature Coefficient of Voc (β)	- 0.30% / K
Temperature Coefficient of Pmax (δ)	- 0.31% / K





Disclaimers

Module Drawing



① Cell ② Back Sheet ③ Frame
④ Junction Box ⑤ Cable ⑥ Adhesive
⑦ Label ⑧ Screw ⑨ Bar Code Label

Mechanical Characteristics

Dimensions (L x W x H)	1,257 x 977 x 35 mm (49.5 x 38.5x 1.4 inch)
Weight	20 kg (44.1 lbs)
Snow Load (to the front of the module) *4	2,400 Pa(IEC61646)/1,600 Pa design load (UL1703)
Wind Load (to the back of the module)	2,400 Pa(IEC61646)/1,600 Pa design load (UL1703)
Module Operating Temperature	- 40 °C ～ 85 °C
Application Class on IEC61730	Class A
Fire Safety Class on IEC61730	Class C
Safety Class on IEC61140	II
Module Fire Performance	Type 1
Cell Type	CIS substrate glass (Cadmium free)
Front Glass	3.2 mm tempered anti-reflective glass
Encapsulant	EVA
Back Sheet	Weatherproof plastic film
Edge Sealant	Butyl rubber
Frame	Anodized aluminum alloy (Color: black)
Junction Box	Protection rating: IP67 (with bypass diode)
Output Cables (Conducter)	2.5 mm²/14 AWG (Halogen free)
Cable Lengths (Symmetrical)	1,200 mm (47.2 inch)
Connectors	Hosiden, HSC, 2013/2014(M/F)

Note *4
UL: 1.5 times design load is applied to the module. Accordingly, 2,400 Pa (50.1 lbs /ft²) is loaded to test the 1,600 Pa (33.4 lbs /ft²) UL design load