

N-TYPE i-TOPCon / BIFACIAL DUAL GLASS

High-output energy. Built for scale.

A 585W bifacial module for commercial and utility-scale installations - combining strong area efficiency, rear-side energy gain and dependable long-term performance.

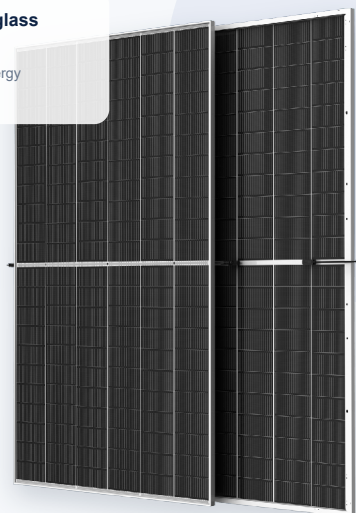
MODEL

SM5-72HTH-585B

585W

Bifacial dual-glass module

Front and rear energy generation



21.6%

Maximum module efficiency

80 ± 5%

Power bifaciality

12 years

Product warranty

30 years

Linear power guarantee

PROJECT ADVANTAGES

More power across the full system lifecycle.

01

Higher system value

Low-voltage architecture supports higher string power, helping reduce balance-of-system cost and improve project economics.

02

Advanced cell platform

N-type i-TOPCon technology delivers high conversion efficiency, strong low-light response and controlled long-term degradation.

03

Reliable dual-glass design

Heat-strengthened glass on both sides and a robust aluminium frame support demanding environments and extended field operation.

04

Additional rear-side yield

Bifacial generation can provide additional energy from reflected irradiance, depending on albedo and installation conditions.

PERFORMANCE WARRANTY

Long-term output confidence.

12
YEAR
PRODUCT


1%

First-year degradation

0.4%

Annual attenuation

87.4%

Guaranteed at year 30

COMPLIANCE & SYSTEM CERTIFICATES

Validated for demanding project environments.

IEC 61215 / IEC 61730 / IEC 61701 / IEC 62716

ISO 9001

Quality management

ISO 14001

Environmental management

ISO 45001

Occupational health & safety

ISO 14067

Product carbon footprint

Electrical performance

STC, NOCT and bifacial nameplate irradiance conditions

Parameter	STC	NOCT	BNPI
Peak power - Pmax (Wp)	585	446	648
Power selection (W)	0 to +5	-	-
Maximum power voltage - Vmp (V)	39.50	37.10	39.50
Maximum power current - Imp (A)	14.82	12.02	16.41
Open-circuit voltage - Voc (V)	47.50	45.00	47.50
Short-circuit current - Isc (A)	15.68	12.64	17.37
Module efficiency (%)	21.6	-	-

STC: 1000W/m², cell temperature 25 C, AM1.5. NOCT: 800W/m², ambient temperature 20 C, wind speed 1m/s. BNPI: front 1000W/m², rear 135W/m², temperature 25 C, AM1.5. Measuring tolerance +/-3%.

Bifacial gain

5%

Backside gain

Pmax	614W
Vmp	39.50V
Imp	15.56A
Voc	47.50V
Isc	16.46A

Power bifaciality: 80 ± 5%.

10%

Backside gain

Pmax	644W
Vmp	39.50V
Imp	16.30A
Voc	47.50V
Isc	17.25A

Operating ratings

Temperature

NOCT	43°C ± 2°C
Pmax coefficient	-0.30%/°C
Voc coefficient	-0.24%/°C
Isc coefficient	+0.04%/°C

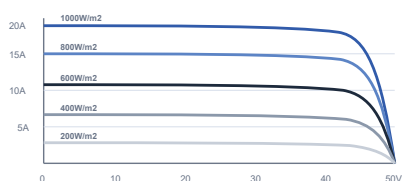
Application

Operating range	-40°C to +85°C
System voltage	1500V DC
Series fuse	35A
Junction box	IP68

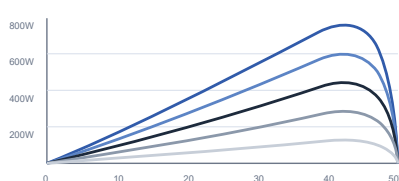
PV module curves

Reference curves for this power class

I-V curve



P-V curve

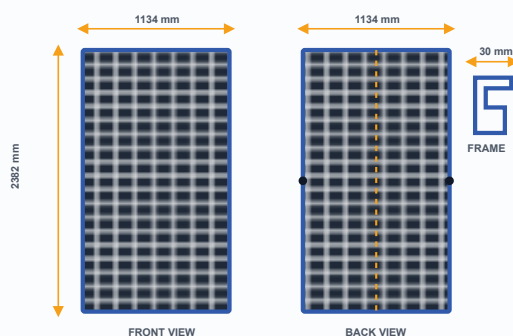


Mechanical specification

Module construction and reference dimensions

Solar cells	N-type i-TOPCon monocrystalline
Cell count	132 cells
Module dimensions	2382 x 1134 x 30 mm
Weight	33.7 kg
Front glass	2.0 mm, high-transmission AR-coated heat-strengthened glass
Back glass	2.0 mm heat-strengthened glass
Frame	30 mm anodised aluminium alloy
Cables	4.0 mm ² / portrait 350 / 280 mm
Connector	MC4 EVO2 / TS4 Plus / TS4*
Packaging	36 modules per box / 720 per 40 ft container

*Connector names are general designations; supplied connector type is subject to the applicable certification and production documents.



Reference drawing. Mounting, grounding and drainage-hole positions follow the approved manufacturing drawing for this module format.


SCAN FOR
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CAUTION: Read the safety and installation instructions before using the product.
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