Quality tested
by Swiss specialist institutes:

OST Eastern Switzerland University of
SUPSI

SWISSOLAR

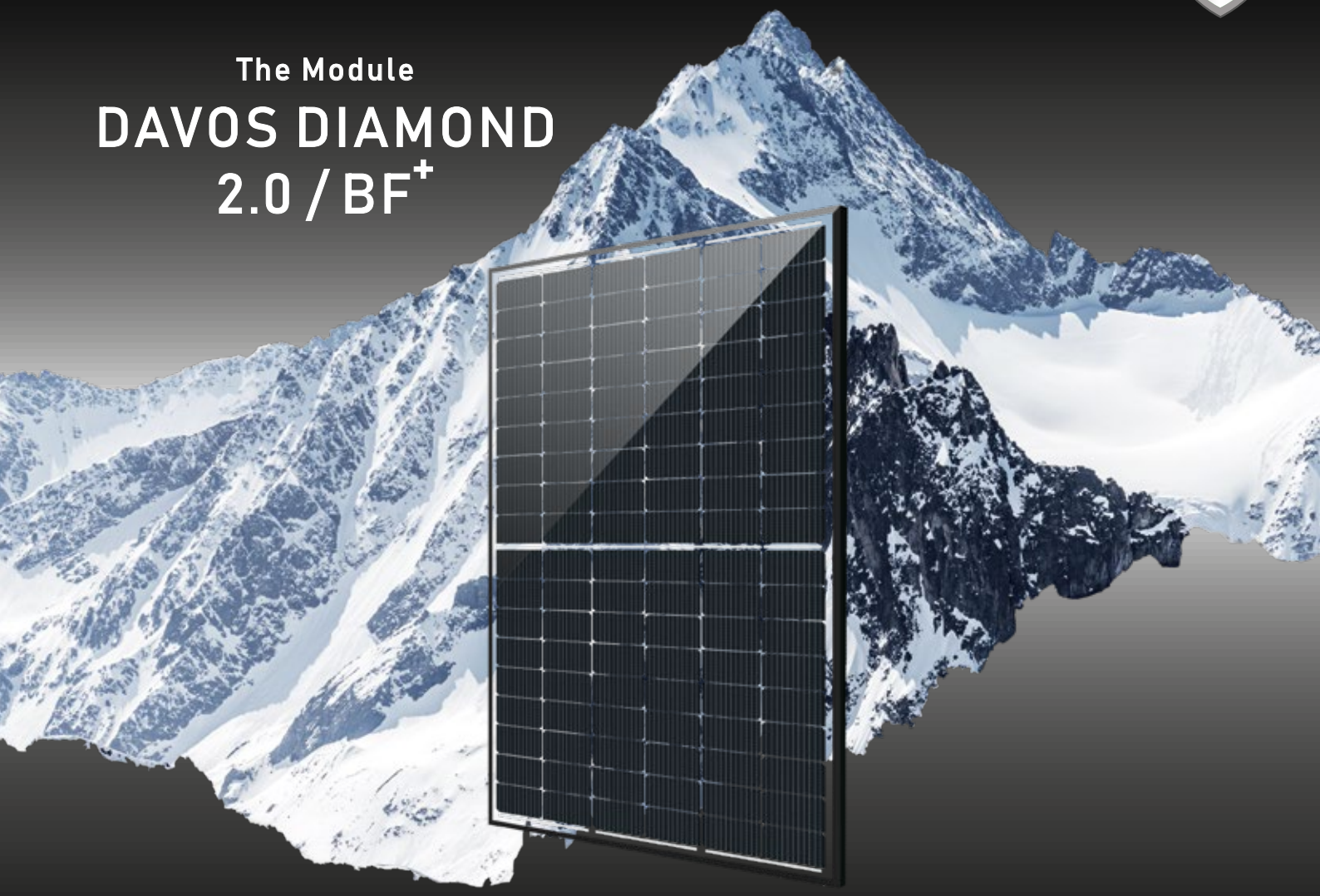
EUPD RESEARCH
TOP INNOVATION
MODULES
SWITZERLAND
2025

SwissWatt One AG

Swiss Know-how
Unique design

The Module

DAVOS DIAMOND 2.0 / BF+



- 40J. — 40-year product warranty
  40-year linear performance guarantee
- Hail class 4
- Only 0.25% linear degradation
- Extremely durable: 8000 PA
- Highest temperature resistance
  -45 bis 88°C
- Up to >22.7 % efficiency
  Up to 26% cell conversion efficiency
- Swiss company
  Swiss guarantor
- UP — Upgraded warranty
  In case of warranty, we replace the module free of charge with the **latest generations**.

35 years standard warranty + 5 years with certified partners

DAVOS DIAMOND 2.0 - 440W / 445W / 450W

Positive performance due to low degradation.

Fire protection class A
pursuant to IEC 61730 - 2 (UL790)

Compact Design
1,72 m x 1,13 m

Operating conditions

Operating temperature	-45 to 88°C
Static load	8000 Pa* (snow) / 4800 Pa (wind load)
Hail	Hail class 4 - Ø40 mm / 29.2 g / at 27.5 m/s

Mechanical specifications

Weight	24 kg ± 3.5 %
Frames	Anodized aluminium alloy (black)
Dimensions	1722 x 1134 x 30 mm
Cell type	Bifacial, n-type TopCon mono - half cut M10
Number of cells	108 cells (6*18) with multibusbar
Front & rear sides	Each 2.0 mm solar glass high-transparency / anti-reflective
Cable cross-section size/junction box	4 mm², cable length 1200 mm. MC4 EVO 2 / IP68 / 3 diodes

Electrical specifications	440	445	450
Voltage at maximum power (Vmpp / V)	33.21	33.39	33.57
Current at maximum power (Impp / A)	13.25	13.33	13.41
Open-circuit voltage (Voc / V)	39.16	39.35	39.54
Short-circuit current (Isc / A)	13.88	13.96	14.04
Efficiency/module efficiency ηm	22.53%	22.78%	23.04%
Temperature coefficient of Pmpp Tk (Pmpp)		-0.30%/°C	
TTemperature coefficient of Isc Tk (Isc)		+0.040%/°C	
Temperature coefficient of Voc Tk (Voc)		-0.28%/°C	
Working nominal temperature NOCT (°C)		43±2°C	
Maximum series fuse (A)		30 A	
Maximum system voltage DC (V)		$1500V_{DC}$	

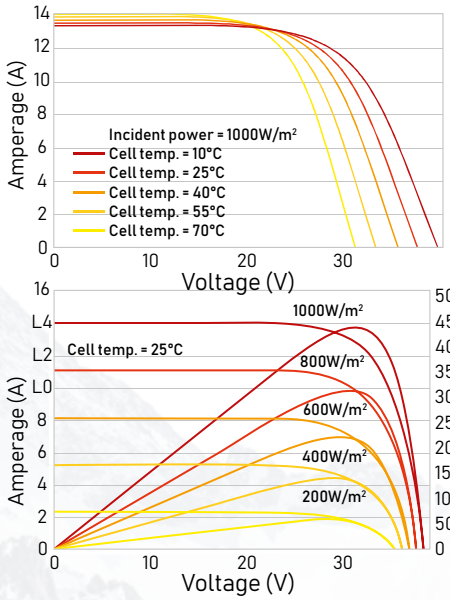
Possible performance enhancement due to bifaciality	440	445	450
5% Pmpp (W)	462.00	467.25	472.50
10% Pmpp (W)	485.10	490.61	496.13
15% Pmpp (W)	509.36	515.14	520.93
30% Pmpp (W)	534.82	540.90	546.98
35% Pmpp (W)	561.56	567.95	574.33

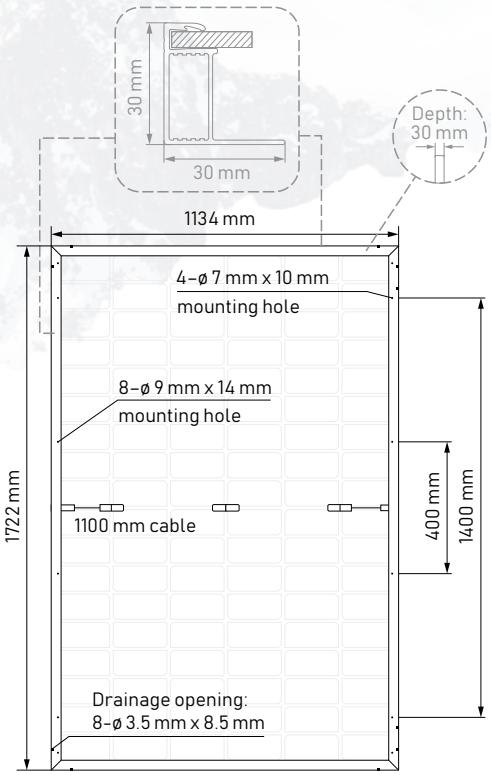
NMOT*:	440	445	450
Rated output (Pmmp / Wp)	337	340	344
Rated voltage (Vmpp / V)	31.79	31.96	32.13
Rated current (Impp / A)	10.59	10.65	10.71
Open-circuit voltage (Voc / V)	37.49	37.67	37.85
Short-circuit current (Isc / A)	11.18	11.24	11.30

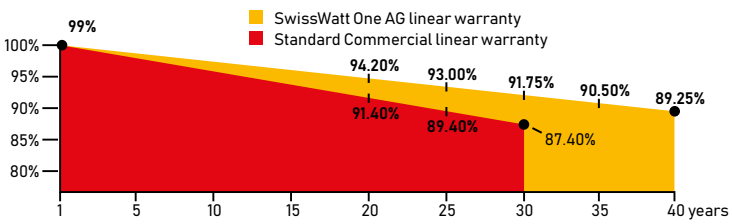
*Irradiance level: 800 W/m²; Ambient temperature: 20°C

Logistics information	
Container type	40'HC
Number of pallets	26
Units per pallet	36
Total number of modules	936

Power curves (440 W)







SINO VOLTAICS

PV CYCLE ASSOCIATION

carbon neutral

TÜVRheinland CERTIFIED
IEC 61215
IEC 61730
Regular Production Surveillance
www.tuv.com
ID xxxxxxxxxx

Technical Parameters and Disclaimer
The technical parameters in this data sheet may vary regionally. SwissWatt One AG makes no warranty as to their complete accuracy. Due to continuous innovations and product improvements, SwissWatt One AG reserves the right to change the information in this data sheet at any time without prior notice. Customers should always refer to the latest version of this data sheet and use it as an integral, legally binding document. In case of discrepancies between the German version and other language versions, the German version shall prevail. **Note:** Please read the safety and installation manual carefully before using this product. Subject to change without notice. Developed in Switzerland and assembled in Asia. Swiss expertise: Customer service, delivery, and warranty processing.

Standard Test Conditions (STC): Air mass: 1,5 1.5 AM / Irradiance: 1000 W/m² / Cell temperature: 25°C / Measurement tolerance: ±3% (Pmax), ±10% (Vmax, Impp, VOC, ISC).

Warranty Conditions: For details on the warranty terms, please visit www.swo.swiss. Possible light-induced degradation of performance is not considered. Additional yields from bifaciality are not guaranteed and depend on the installation location and method.

Swiss & EU: PV-DC connectors must comply with standards (IEC 62548, NIN 2020, and SN EN 62852), be of the same type and manufacturer, be certified according to SN EN 62852 and EU standard EN 50618, and be installed using approved tools to ensure safety, efficiency, and warranty claims.

CE
ISO 9001:2015:ISO Quality Management System
ISO 14001:2015:ISO Environment Management System
ISO 45001:Occupational Health and Safety

SwissWatt One AG, Espenstrasse 139, CH-9443 Widnau www.swo.swiss

2503