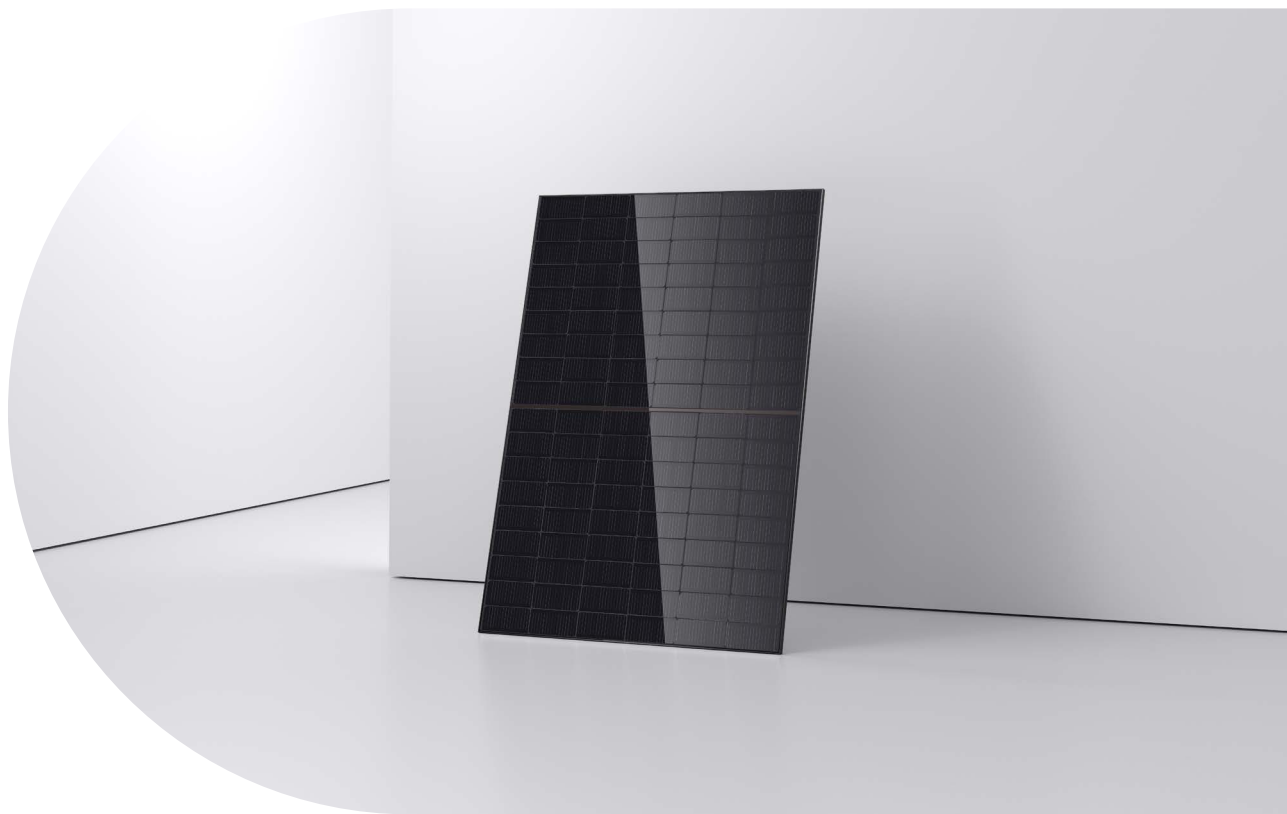


Photovoltaic module

# SENEC.Solar 440–450N DGT G4

## Technical data sheet



<b>Valid for</b>	SENEC.Solar 440–450N DGT G4
<b>Product type</b>	S1-D1
<b>Valid in</b>	Germany
<b>Document version</b>	1.1
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## Technical data

### General properties

Cell technology	N-type monocrystalline half-cell
Cell size	182 × 186 mm (full cell)
Max. weight	24.5 kg
Module size (L x W x H)	1,762 mm × 1,134 mm × 30 mm
Cable length	1,100 mm
Cable core cross-section	4.0 mm <sup>2</sup>
Glass (front)	2 mm with anti-reflective coating, highly transparent
Glass (rear panel)	2 mm, transparent, hardened
Number of bypass diodes	3
Frame	Black, anodised aluminium alloy
Junction box ingress protection	IP68
Connection	MC4-Evo2A (Stäubli)

The colour may vary between the individual cells of a PV module or between individual PV modules; this has no impact on performance.

### Electrical properties

STC light intensity 1,000 W/m<sup>2</sup>; cell temperature 25 °C; air mass (AM) 1.5; sorted according to P<sub>MPP</sub> 0 to +5 W

	440	445	450
Max. nominal power (P <sub>MPP</sub> /W <sub>P</sub> )*			
Nominal voltage (V <sub>MPP</sub> /V)	32.84	33.04	33.24
Nominal current (I <sub>MPP</sub> /A)	13.40	13.47	13.54
Open-circuit voltage (V <sub>OC</sub> /V)*	39.40	39.60	39.80
Short circuit current (I <sub>SC</sub> /A)*	13.90	13.97	14.04
Module efficiency [%]*	22.00	22.30	22.50

\*Tolerances: P<sub>MPP</sub>: ± 3.0%; V<sub>OC</sub>: ± 3.0%; I<sub>SC</sub>: ± 4.0%

NMOT light intensity 800 W/m<sup>2</sup>; ambient temperature 20 °C; air mass AM 1.5; wind speed 1 m/s

	331	335	339
Max. nominal power (P <sub>MPP</sub> /W <sub>P</sub> )			
Nominal voltage (V <sub>MPP</sub> /V)	30.67	30.86	31.05
Nominal current (I <sub>MPP</sub> /A)	10.83	10.89	10.95
Open-circuit voltage (V <sub>OC</sub> /V)	37.32	37.51	37.70
Short circuit current (I <sub>SC</sub> /A)	11.19	11.25	11.31

### Operating conditions

Max. system voltage	1,500 V
Operating temperature	-40 °C to +85 °C
NMOT	42 ± 2 °C
Max. reverse current	30 A
Max. design load (push/pull)	3,600/1,600 Pa*
Max. test load (push/pull)	5,400/2,400 Pa*
Protection class	II

\*see the installation manual for further information

### Temperature coefficients

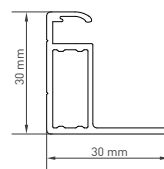
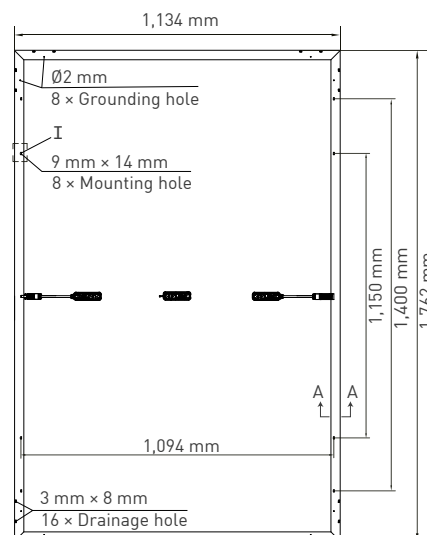
P <sub>MPP</sub>	-0.29 %/°C
V <sub>OC</sub>	-0.25 %/°C
I <sub>SC</sub>	+0.048 %/°C

### Packaging specifications

Dimensions including pallet (L × W × H)	1,800 mm × 1,140 mm × 1,250 mm
Gross weight	943 kg
Max. pallet stacking	1 on 1 (2 – one on top of the other)
Modules per pack	36

All statements without guarantee. Errors, typographical mistakes and changes are reserved. Illustrations may differ from the delivered product.

### Technical drawing



### Certifications:

IEC 61215-1:2021, IEC 61215-2:2021

IEC 61730-1:2016, IEC 61730-2:2016

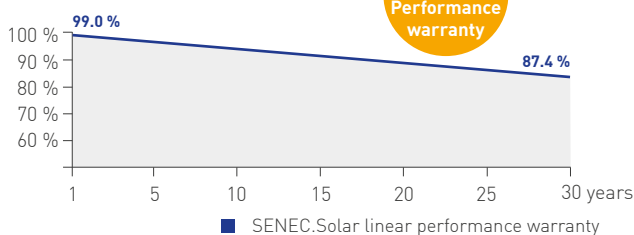


Bifacial yield depending on insolation at the installation location: P<sub>MPP</sub> 0 to +5 W

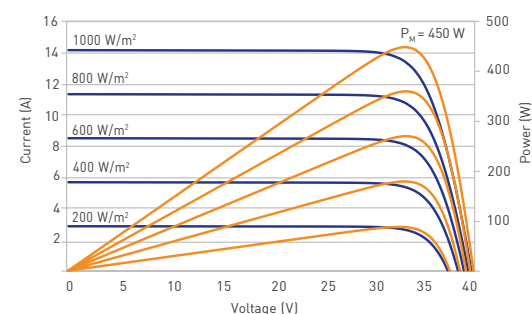
	484	490	495
10 % (P <sub>MPP</sub> /W <sub>P</sub> )*			
20 % (P <sub>MPP</sub> /W <sub>P</sub> )	528	534	540
30 % (P <sub>MPP</sub> /W <sub>P</sub> )	572	579	585

\*Tolerances: P<sub>MPP</sub>: ± 3 %

### Performance warranty



### Characteristic curves



## Imprint

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