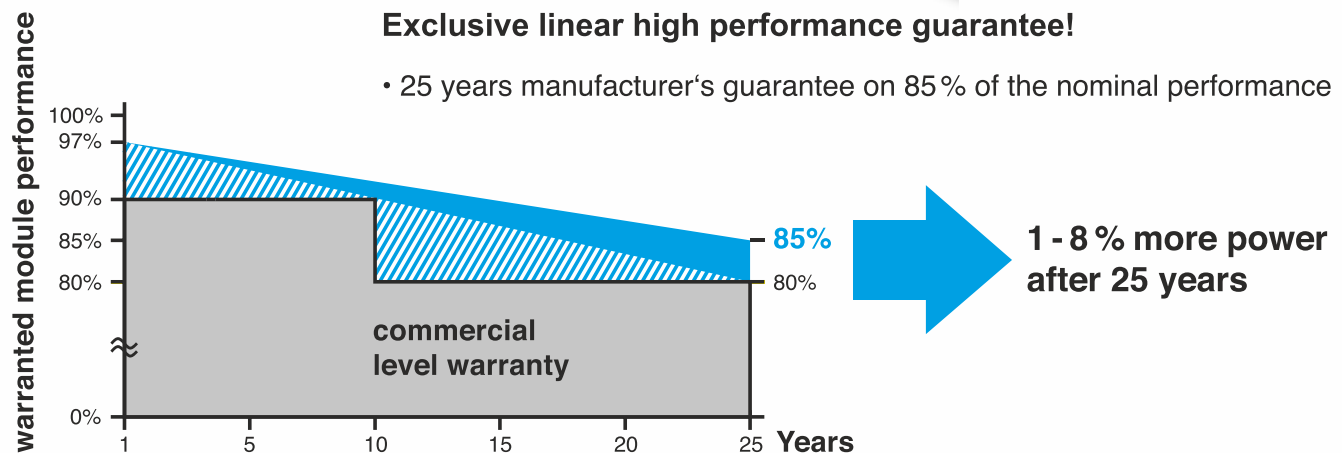


Stalker Pro 440-460Wp

High performance solar module
120 halfcell, monocrystalline

The advantages:

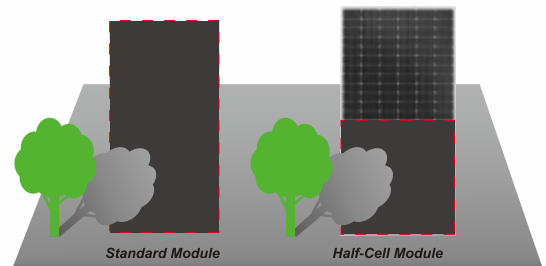
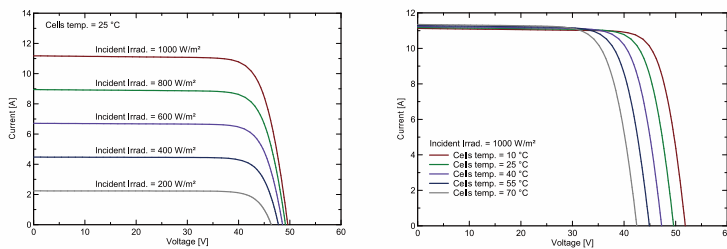
- 25** Years 25 years manufacturer's warranty
- HC** Highest module performance through Half-Cut-technology and tested materials
- Wp** Guaranteed positive power tolerance from 0-5 Wp by individual measurement
- 2.400 Pa** Maximum 2400 Pa snow load
- 100%** 100% electroluminescence inspection
- IP 68** High quality junction box and connector systems



Electrical data (at standard conditions (STC) irradiance 1000 watt/m², spectrum AM 1,5 at a cell temperature of 25°C)

Type	Nominal output P _{mpp}	Nominal voltage U _{mpp}	Nominal current I _{mpp}	Short circuit current I _{sc}	Open circuit voltage U _{oc}	Module conversion efficiency
NB-440-60M	440 Wp	33,72V	13,05A	13,73A	41,02V	20,40%
NB-445-60M	445 Wp	33,82V	13,16A	13,79A	41,10V	20,62%
NB-450-60M	450 Wp	33,92V	13,27A	13,85A	41,18V	20,85%
NB-455-60M	455 Wp	34,12V	13,34A	14,01A	41,33V	21,08%
NB-460-60M	460 Wp	34,22V	13,44A	14,11A	41,48V	21,32%

I-V Curve



Design

Frontside	3,2 mm hardened, low-reflection white glass
Cells	120 monocrystalline high efficiency cells
Backside	Composite film
Frame	35 mm silver aluminium frame

Mechanical data

L x W x H	1903 x 1134 x 30 mm
Weight	24,0kg with frame

Power connection

Socket	Protection Class IP68
Wire	approx. 1,2 m, 4 mm ²
Plug-in system	Plug/socket IP68, Stäubli EVO2 / EVO2 pluggable

Limit values

System voltage	1500V~2000V DC
NOCT (nominal operating cell temperature)*	45°C +/-2K
Max. load-carrying capacity	2400 N/m ²
Reverse current feed IR	20,0 A
Permissible operating temperature	-40°C to 85°C / -40F to 185F

(No external voltages greater than U_{oc} may be applied to the module)

* NOCT, irradiance 800 W/m²; AM 1,5; wind speed 1 m/s; Temperature 20°C

Temperature coefficients

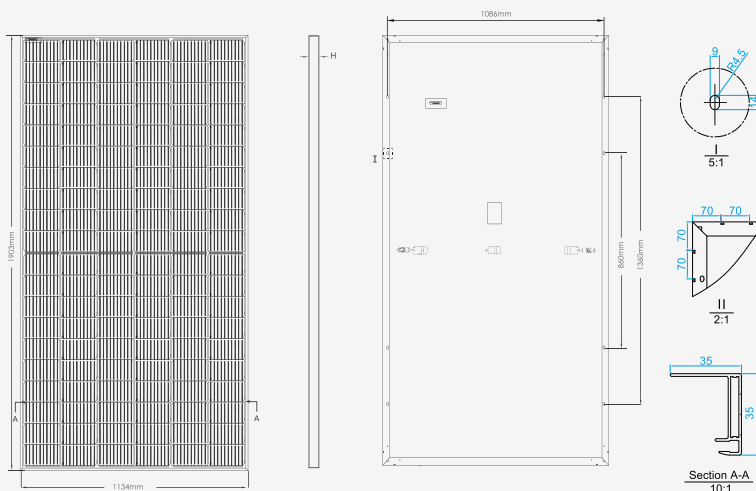
Voltage U _{oc}	-0,27 %/K
Current I _{sc}	0,048 %/K
Output P _{mpp}	-0,35 %/K

Low-light performance

I-U characteristic curve	Current I _{pp}	Voltage U _{pp}
200 W/m ²	2,24 A	40,05 V
400 W/m ²	4,51 A	40,51 V
600 W/m ²	6,74 A	40,82 V
800 W/m ²	8,91 A	41,17 V
1000 W/m ²	10,94 A	41,61 V

Packaging

Module pieces per pallet	36
Module pieces per HC-container	864



All dimensions in mm