

EUROPEAN PREMIUM PV MODULES

BRUK-BET®
FOTOWOLTAIKA

PERFECT ***EDGE*** ***PRO*** **PEM.WS-460 HALF-CELL**



100% ELECTROLUMINESCENCE INSPECTION



POSITIVE POWER TOLERANCE



ANTIREFLECTIVE COATING



HIGH FILL FACTOR



RESISTANCE TO STATIC LOAD UP TO 7000 Pa*



EXTREME HAIL UNDURANCE



WIND LOAD UP TO 4000 Pa*



RESISTANCE TO PID EFFECT



RESISTANCE TO DYNAMIC LOADS

BRUK-BET®
FOTOWOLTAIKA

MANUFACTURING
SINCE
2011

* Confirmed by the manufacturer's internal tests.



PEM.WS-460 Technical specifications

ELECTRICAL PARAMETERS STC	PEM.WS-460
Nominal power [Wp]	460
Short-circuit current [A]	13,77
Nominal current [A]	13,13
Open circuit voltage [V]	41,68
Nominal voltage [V]	35,06
Efficiency [%]	21,05

STC: Irradiance 1000 W/m², Air mass 1.5 AM, Cells temperature 25 °C, Measurement tolerance STC ± 2 %.

ELECTRICAL PARAMETERS LIC	PEM.WS-460
Nominal power [Wp]	87,9
Short-circuit current [A]	2,71
Nominal current [A]	2,55
Open circuit voltage [V]	38,82
Nominal voltage [V]	34,41

LIC: Irradiance 200 W/m², Air mass 1.5 AM, Cells temperature 25 °C, Measurement tolerance LIC ± 5 %.

APPLICATIONS PARAMETERS	PEM.WS-460
Power tolerance	0/+1%
Safety class	II
Maximum system voltage	1000/1500 VDC
Operating temperature	-40 / +85 °C
Reverse current protection	25 A

TEMPERATURE PARAMETERS	PEM.WS-460
Current temperature coeff.	0,046 %/°C
Voltage temperature coeff.	-0,259 %/°C
Power temperature coeff.	-0,324 %/°C

MECHANICAL PARAMETERS	PEM.WS-460
Length [mm]	1920
Width [mm]	1138
Height [mm]	40
Weight [kg]	24,5

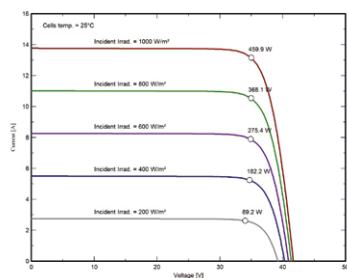
COMPOSITION	PEM.WS-460
Front glass	3,2 mm, Tempered
Encapsulant	EVA film
Frame	Anodised aluminium, Silver
Cells	Monocrystalline 10BB, Class A
Quantity	120
Junction box	IP68, 3 by-pass diodes
Cables	2 x 1100 mm, $\varnothing = 4 \text{ mm}^2$
Connectors	Sunter PV-ZH202B, IP68

ENDURANCE PARAMETERS	PEM.WS-460
Design Load (Test Load) Front	7000 Pa
Design Load (Test Load) Rear	4000 Pa
Hail Endurance	$\varnothing=55 \text{ mm}$, $V=122 \text{ km/h}$

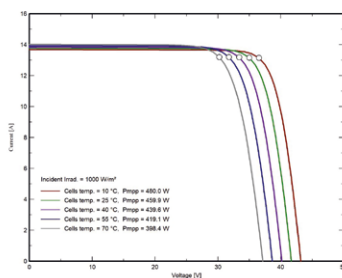
* Potwierdzone wewnętrznymi badaniami producenta.

PACKING	PEM.WS-460
Packing system	Carton 2,0 x 1,2 x 1,25 m
Quantity	26 Pcs/Palette
Transport	26 Palettes/TIR

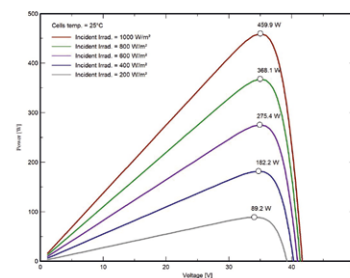
CURRENT/VOLTAGE



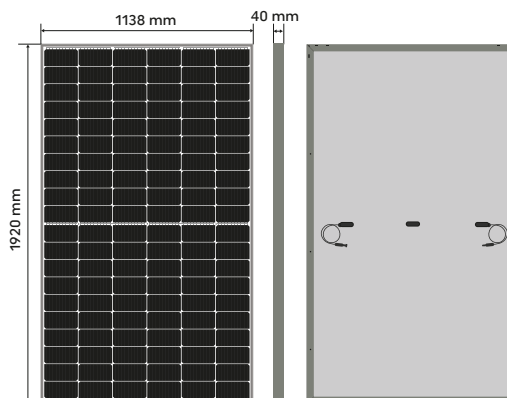
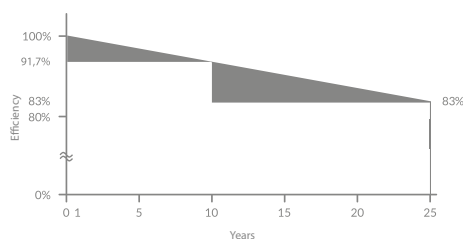
CURRENT/VOLTAGE



POWER/VOLTAGE



LINEAR POWER WARRANTY



Bruk-Bet Fotowoltaika reserves the right to make changes without notice. This data card complies with requirements of the standard EN 50380.

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