

NINJA SERIES

HALF-CELL N-TYPE TOPCON

ALL BLACK GLASS-GLASS BIFACIAL MODULE

TYPE: WSM-54DHP-490~510W

490-510W

POWER OUTPUT

22.8%

MAX EFFICIENCY



High module conversion efficiency

Module efficiency up to 22.8% achieved through advanced cell technology and manufacturing process



Multi busbar technology

Superior optical utilization and current collection capacity, effectively improving product power and reliability



Excellent low light performance

More Power output in low light conditions such as cloudy days, mornings and evenings



Superior load-bearing capacity

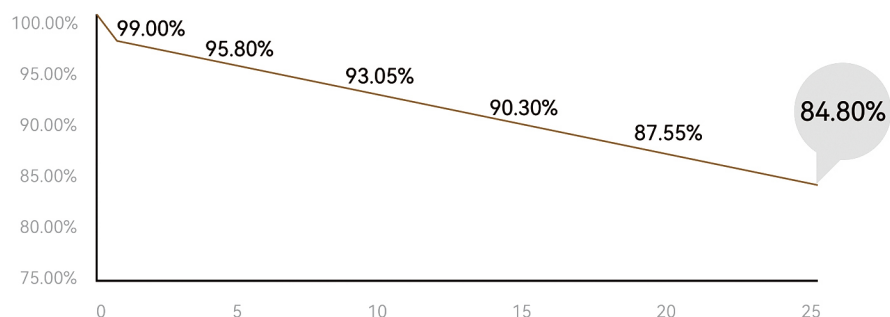
Module certified to withstand 5400 Pa front side max static test load and 2400 Pa rear side max static test load

MANAGEMENT SYSTEM AND PRODUCT CERTIFICATION

ISO45001: 2018/Occupational Health and Safety Management System

ISO14001: 2015/Environment Management System

ISO9001: 2015/Quality Management System



25-year
Warranty for materials



30-year
Warranty for linear power output

Manufactured by
DANYANG WEISHENG ELECTRONICS CO., LTD

Email: sales@bienesol.com

Tel: +86-511-8696 2290

Address: No.88 Qiliang North Road, Danyang City, Jiangsu, China

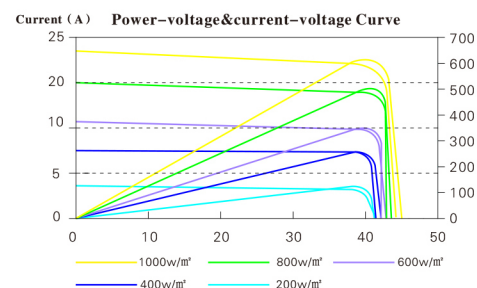
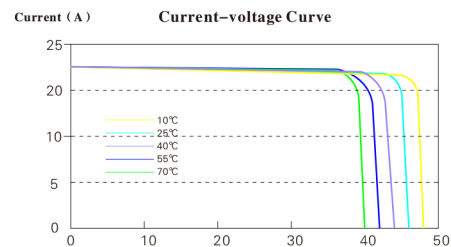
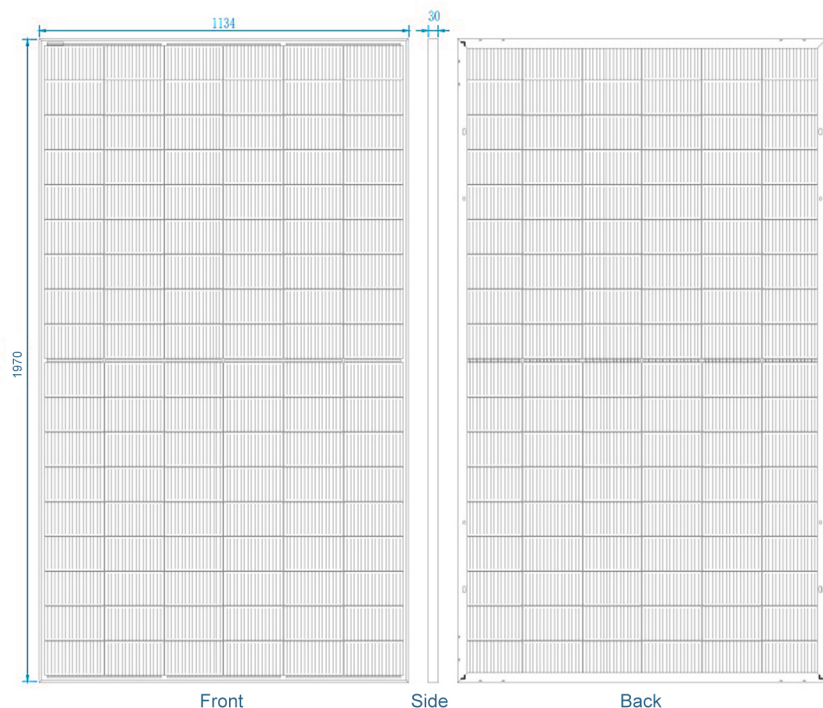
Website: www.bienesol.com

Authorized Distributor and Service Partner for Europe
ME SOLAR GMBH

Email: info@me-solar.de

Tel: +49 (0)2131 2023 806

Address: Im Taubental 17, 41468 Neuss, Germany



Electrical properties

Component model	WSM-54DHP-490~510W				
Test conditions	STC/NOCT	STC/NOCT	STC/NOCT	STC/NOCT	STC/NOCT
Peak power(Pmax/W)	490/371	495/375	500/378	505/382	510/386
Open circuit voltage(Voc/V)	38.99/36.69	39.25/36.93	39.51/37.18	39.77/37.42	40.03/37.67
Short circuit current(Isc/A)	15.88/12.78	15.96/12.85	16.04/12.91	16.12/12.98	16.2/13.04
Peak operating woltage(Vmp/V)	32.6/30.29	32.8/30.48	32.99/30.65	33.47/31.09	33.93/31.53
Pcak operating current(Imp/A)	15.03/12.25	15.09/12.3	15.15/12.35	15.09/12.3	15.03/12.25
Component conersion efficiency(%)	21.93	22.16	22.38	22.61	22.83

Measured value under standard test conditions (atmospheric mass AM1.5, irradiance 1000W/m², battery temperature 25°C), measurement tolerance: ±3%;
NOCT: irradiance 800W/m², ambient temperature 20°C, wind speed 1m/s.

Product specifications

Solar cell	Mono-crystalline 210*182mm
Qty	108pcs
Dimension	1970x1134x30mm
Weight	26.8kg
Glass	2.0mm+2.0mm tempered glass
Frame	Aluminum oxide alloy
JunctionBox	IP68, 3 diodes
Output cable	4.0mm ² , (-) 1200mm (+) 1200mm in length

*Product specifications are subject to change without notice

Temperature characteristics

Nominal component operating temperature	43°C (± 2°C)
Peak power temperature coefficient	-0.34% /°C
Open circuit voltage temperature coefficient	-0.25% /°C
Short circuit voltage temperature coefficient	0.04% /°C

Packaging information

Qty per box	36pcs
Qty per 40ft HQ container	720pcs

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