



Monofacial

Bifacial

# PU410-430WNM101 N-Type

Rated Power 410-430W



- No risk of spontaneous detonation
- Bifacial Module is 30% lighter than Dual-Glass Module
- Bifacial cells, provide an additional output
- Ability to breath, The inner CH<sub>3</sub>COOH can be released

**N** N-Type MBB Cell  
New circuit design N-type cells, can increase the output power of 10W~20W

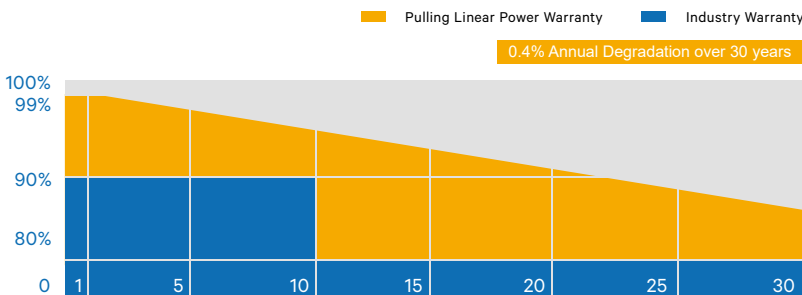
**Low Light Features**  
Higher performance under low light environment.

**Higher Output Power**  
Module adopts 182\*182mm half cells, bifacial module provide an additional 5%~25% output.

**PID Protection**  
Ensure the attenuation probability caused by PID phenomenon is minimized.

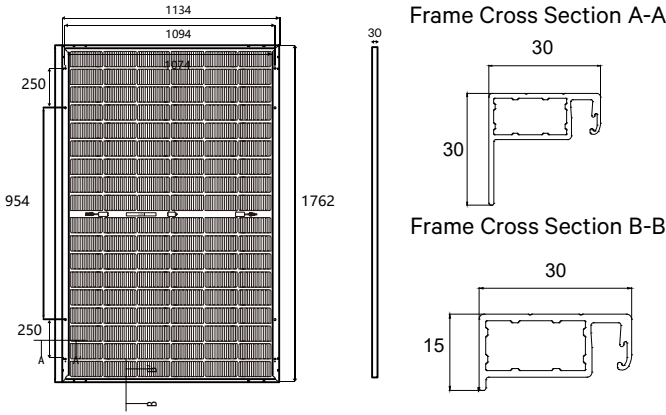
**Harsh Environmental Adaptability**  
Strict salt spray and ammonia corrosion test by TUV Nord.

**Load Capacity**  
Mechanical load tests including wind load 2400 Pa and snow load 5400 Pa done by TUV Nord.



SUZHOU PULLING ENERGY CO., LTD

## MECHANICAL DIAGRAMS



## SPECIFICATIONS

Weight	22kg
Dimensions	1762mm*1134mm*30mm
Cell Dimensions	182*182mm
Cell Amount	54*2 pcs
Maximum System Voltage	1500V
Junction Box	IP68
Frame	Aluminum Alloy
Cable	4mm <sup>2</sup> , N 1100mm/P 1100mm or customized length
Connector	MC4 compatible
Application Level	Class A
Bifaciality	80±5%

## ELECTRICAL PARAMETERS AT STC

Power	410W	415W	420W	425W	430W
Open Circuit Voltage	38.19V	38.38V	38.58V	38.78V	38.97V
Short Circuit Current	13.50A	13.58A	13.66A	13.73A	13.81A
Maximum Power Voltage	31.64V	31.80V	32.01V	32.20V	32.40V
Maximum Power Current	12.96A	13.05A	13.12A	13.20A	13.27A
Module Efficiency	20.52%	20.77%	21.02%	21.27%	21.52%

\* Under Standard Test Conditions (STC) of irradiance of 1000 W/m<sup>2</sup>, spectrum AM 1.5 and cell temperature of 25°C.

## ELECTRICAL PARAMETERS AT NMOT

Power	309W	312W	316W	320W	324W
Open Circuit Voltage	36.28V	36.47V	36.65V	36.83V	37.02V
Short Circuit Current	10.84V	10.89A	10.96A	11.02A	11.09A
Maximum Power Voltage	29.51V	29.66V	29.81V	29.96V	30.08V
Maximum Power Current	10.47A	10.52A	10.60A	10.68A	10.77A
Module Efficiency	15.46%	15.61%	15.81%	16.01%	16.20%

\* Under Nominal Module Operating Temperature (NMOT), irradiance of 800 W/m<sup>2</sup>, spectrum AM 1.5, ambient temperature 20°C, wind speed 1 m/s.

## ELECTRICAL PARAMETERS ( AT 10% BIFACIAL POWER OUTPUT )

Output Power	451W	457W	462W	468W	473W
Open Circuit Voltage	38.38V	38.59V	38.80V	39.00V	39.21V
Short Circuit Current	14.86A	14.96A	15.07A	15.17A	15.26A
Maximum Power Voltage	31.72V	31.94V	32.11V	32.32V	32.51V
Maximum Power Current	14.22A	14.31A	14.39A	14.48A	14.55A

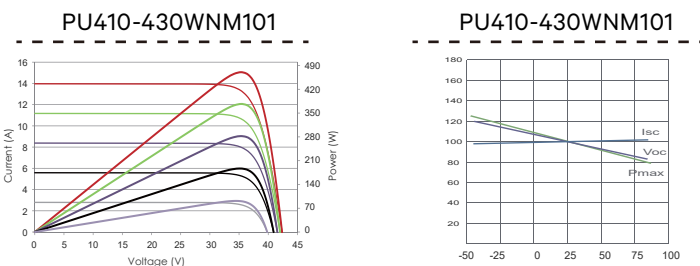
## TEMPERATURE CHARACTERISTICS

NMOT	41±3°C	Temp Coefficient of ISC	+0.046%/°C
Temp Coefficient of VOC	-0.25%/°C	Temp Coefficient of Pmax	-0.30%/°C

## PACKING CONFIGURATION

Modules/Pallet	36 Pieces	Modules/40'Container	936 Pieces
Packing Description	26 Pallets, Total=(36+36)x13=936 Pieces		

## CHARACTERISTICS



## MAXIMUM RATING

Output Tolerance	0~+5W
Operating Temperature	-40°C~+85°C
Wind Load/Snow Load	2400pa/5400pa
Fuse Current	25A

