

Residential / Commercial



**NUSA SOLAR**  
INDONESIAN GREEN ENERGY

## N-Type

### MONO-FACIAL MODULE

# Type: NSxxxM10T-54SW

**Power Range: 430 - 445 W**

**Max. Efficiency : 22.8 %**



#### Better Performance

Our modules perform better on sunny and hot days thanks to its optimized temperature coefficient.



#### Excellent Quality

Industry leading manufacturing and intensive quality tests above the IEC standard ensures reliable modules and a secured investment.



#### Excellent Low Light Performance

Our modules can also provide higher power output under low light conditions, such as sunset, cloudy, or dawn.



#### High-quality service

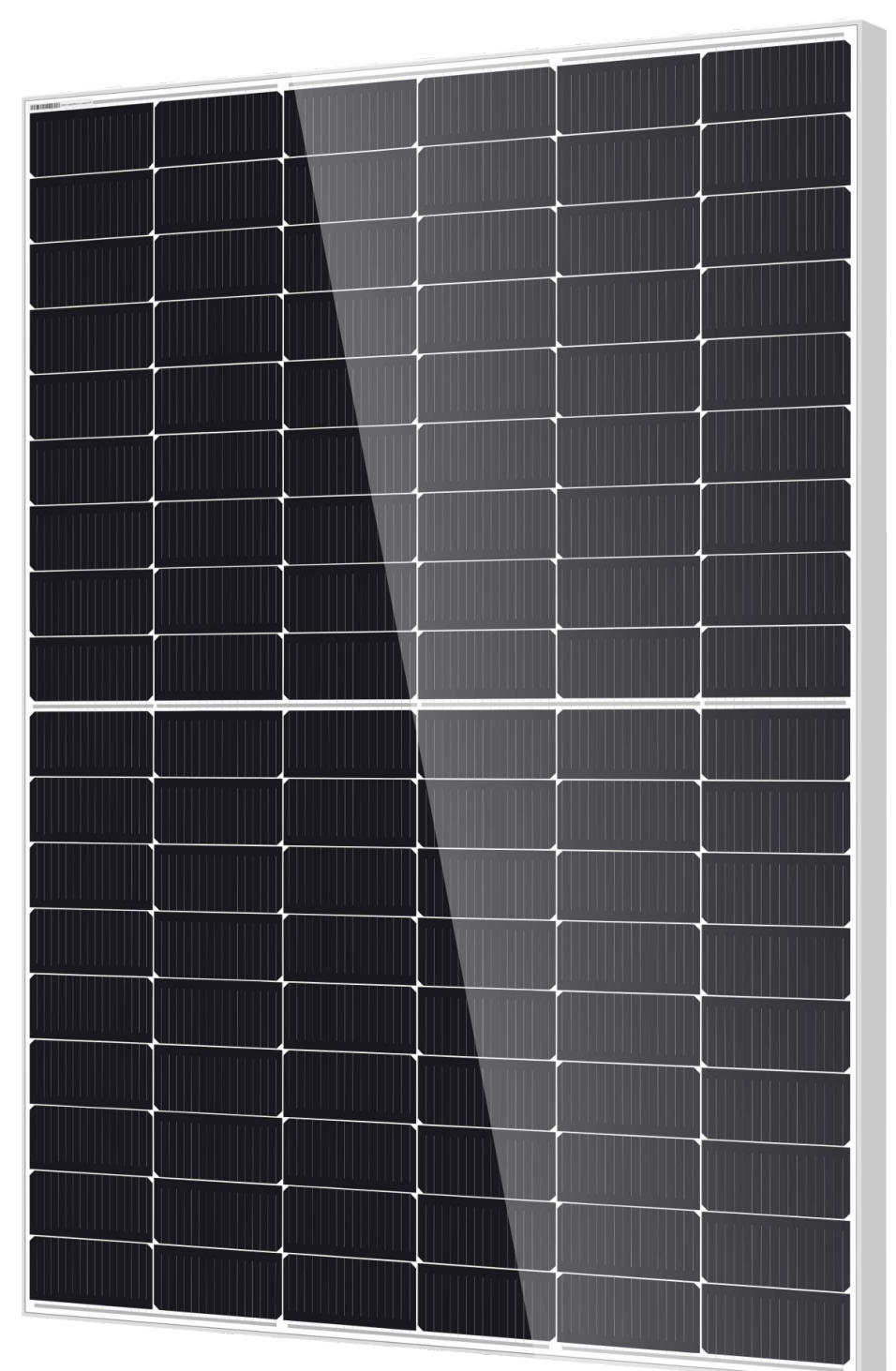
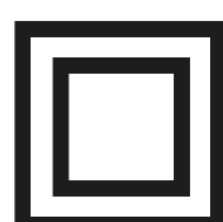
We provide a customer-oriented and localized services, covering pre-sale, sale and after-sales.

## Certifications

ISO 9001 Quality management system

ISO 14001 Environmental management system

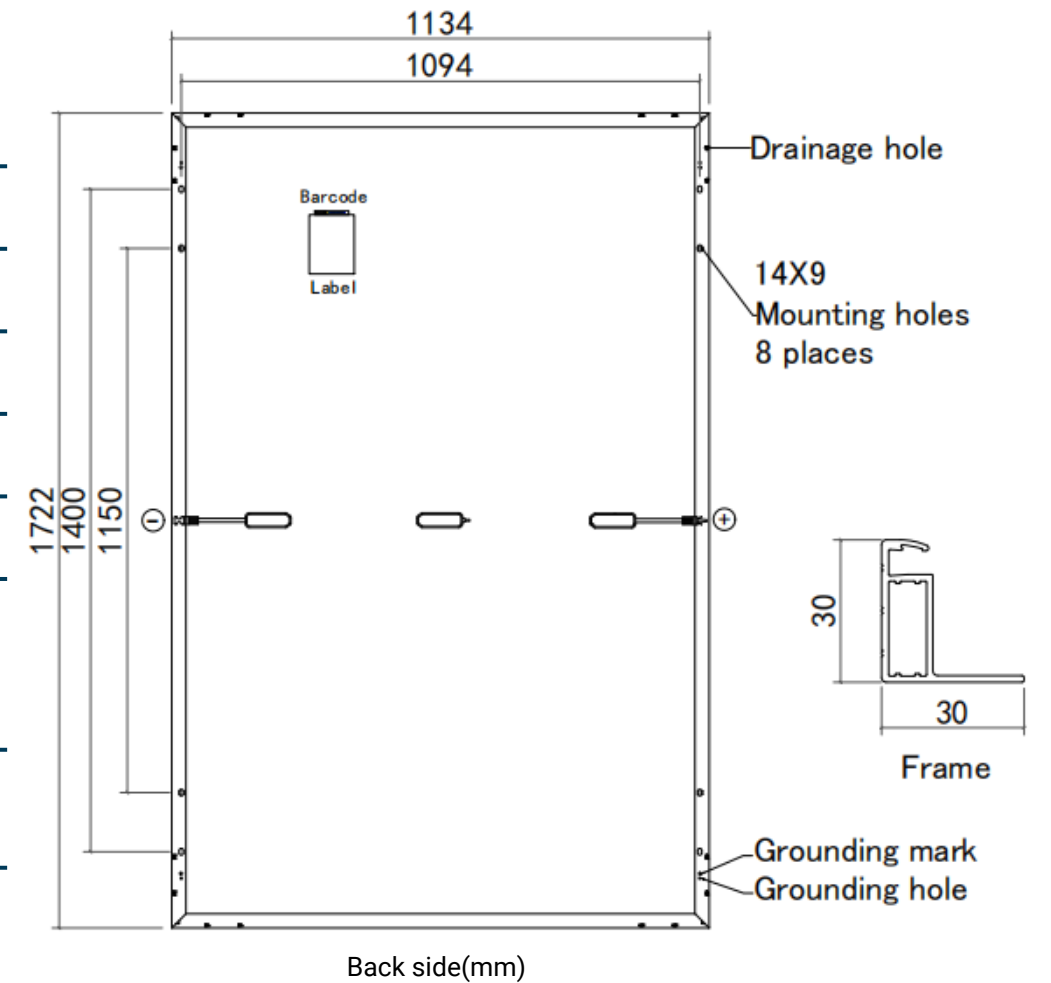
ISO 45001 Occupational health and safety management system



# NSxxxM10T-54SW

## Module Specification

Cell Type	N-type Mono-crystalline , 108 (6x18)
Dimensions (mm)	1722 x 1134 x 30
Weight (kg)	21.2
Front Cover	3.2 mm tempered solar glass with anti-reflective coating
Rear Cover	Backsheet
Junction Box	3 Diodes, IP68 according to IEC 62790
Cables	4mm <sup>2</sup> /Portrait: 350mm (+)/250mm(-) Landscape: 1100mm(+)/1100mm(-) Length can be customized
Connector Type	PV-ZH202B or MC4 (1000V) PV-ZH202B or MC4-EVO 2A (1500V)



## Electrical Specifications<sup>1</sup>

Module Type	NS430M10T-54SW		NS435M10T-54SW		NS440M10T-54SW		NS445M10T-54SW	
	NS430M10T-54SW-V	NS430M10T-54SW-V	NS435M10T-54SW-V	NS435M10T-54SW-V	NS440M10T-54SW-V	NS440M10T-54SW-V	NS445M10T-54SW-V	NS445M10T-54SW-V
Testing Condition	STC <sup>2</sup>	NMOT <sup>3</sup>	STC	NMOT	STC	NMOT	STC	NMOT
<b>Maximum Power (Pmax/W)</b>	<b>430</b>	323	<b>435</b>	327	<b>440</b>	331	<b>445</b>	335
Maximum Power Current (Imp/A)	13.14	10.64	13.21	10.70	13.28	10.76	13.35	10.71
Maximum Power Voltage (Vmp/V)	32.76	30.39	32.96	30.57	33.16	30.76	33.36	31.28
Short-circuit Current (Isc/A)	13.90	11.21	13.96	11.25	14.02	11.29	14.08	11.37
Open-circuit Voltage (Voc/V)	39.21	36.83	39.41	37.01	39.61	37.19	39.81	37.81
<b>Module Efficiency STC (%)</b>	<b>22.0</b>		<b>22.3</b>		<b>22.5</b>		<b>22.8</b>	

<sup>1</sup> Measurements according to IEC 60904-3, Measurement tolerance: ISC: ±4 %, VOC: ±3 %,   
<sup>2</sup> STC (Standard Test Condition): Radiation 1000 W/m<sup>2</sup>, Module temperature 25°C, AM = 1.5   
<sup>3</sup> NMOT: Radiation 800 W/m<sup>2</sup>, Ambient temperature 20°C, AM = 1.5, Wind Speed 1 m/s

## Certifications and Warranty

Certifications	IEC 61215, IEC 61730 Ammonia Corrosion Test: IEC 62716 Salt Mist Corrosion Test: IEC 61701 PID (IEC TS 62804); LeTID (IEC TS 63342) Dust & Sand (IEC 60068)
WEEE Registration No.	DE 50188598
Product Warranty	20 years
Peak Power Warranty	30 years linear warranty

1.) First year: min. 99 %. 2.) From the 2nd year: Max. 0.4 % degradation annually. 3.) Min. 87.4 % in the 30th year.

## Operating conditions

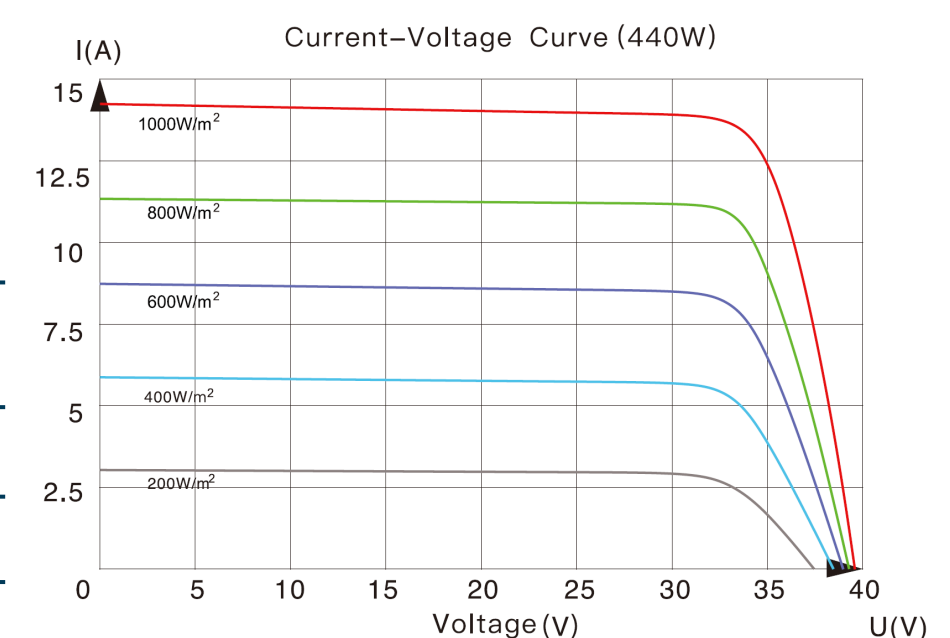
Operating Temperature (°C)	-40 to +85
Maximum System Voltage(V)	1000V/1500V DC (IEC)
Overcurrent protection rating (A)	25
Power Performance Tolerance (%)	0 / +3
Protection class	II
Max. Test Load, Push/Pull (Pa)	Snow 5400 / Wind 2400
Max. Design Load, Push/Pull (Pa)	3600 / 1600

## Temperature Characteristics

Nominal Module Operating Temperature (NMOT)	42 ± 2 °C
Temperature Coefficient of Pmax (%/ °C)	-0.29
Temperature Coefficient of Voc (%/ °C)	-0.25
Temperature Coefficient of Isc (%/ °C)	+0.048

## Packaging

Container	40' HQ
Pallet Dimensions(mm)	1770 × 1140 × 1250
Pieces per Pallet	36
Pieces per Container	936



Statement: The installation instructions and the warranty conditions must be followed. Due to technological progress, product parameters will be adjusted accordingly. When signing the contract, the latest data of the company shall prevail.



PT. NUSA SOLAR INDONESIA.  
 kawasan Industri Terpadu Kabil, Jalan Mas Surya Negara VIII No. 10, Desa/Kelurahan Batu Besar, Kec.  
 Nongsa, Kota Batam, Provinsi Kepulauan Riau, Indonesia 29467  
 Tel: +62-778-8711052 E-mail: solar@nusa-solar.com Website: www.nusa-solar.com

All information in this data sheet corresponds to EN 50380. Changes and errors excepted.  
 Status: 01/2024, Document: EN\_DS-M10T-54SW-202401\_1