



Product Service

# CERTIFICATE

No. Z2 092954 0019 Rev. 11

**Holder of Certificate:** **VIETNAM SUNERGY  
JOINT STOCK COMPANY**

Lot III-Dong Vang Area  
Dinh Tram Industrial Zone  
Hoang Ninh Commune  
Viet Yen District  
230000 Bac Giang Province  
VIETNAM

**Certification Mark:**



**Product:** **Crystalline Silicon Terrestrial Photovoltaic (PV) Modules  
Mono-crystalline Silicon Photovoltaic module**

The product was tested on a voluntary basis and complies with the essential requirements. The certification mark shown above can be affixed on the product. It is not permitted to alter the certification mark in any way. In addition, the certification holder must not transfer the certificate to third parties. This certificate is valid until the listed date, unless it is cancelled earlier. All applicable requirements of the testing and certification regulations of TÜV SÜD Group have to be complied. For details see: [www.tuvsud.com/ps-cert](http://www.tuvsud.com/ps-cert)

**Test report no.:** 704061802612-11

**Valid until:** 2027-10-17

**Date,** 2022-10-18

( David Bo )



# CERTIFICATE

No. Z2 092954 0019 Rev. 11

**Model(s):**

VSUNxxx-72BMH-DG  
 (xxx=350-395, in step of 5);  
 VSUNxxx-60BMH-DG  
 (xxx=295-335, in step of 5);  
 VSUNxxx-144BMH-DG  
 (xxx=390-415 and xxx=430-450 and xxx=530-550, in step of 5);  
 VSUNxxx-132BMH-DG  
 (xxx=485-500 and xxx=645-670, in step of 5);  
 VSUNxxx-120BMH-DG  
 (xxx=325-345, xxx=360-375,  
 xxx=445-455 and xxx=595-610, in step of 5);  
 VSUNxxx-108BMH-DG (xxx=400-410, in step of 5);  
 VSUNxxxN-144BMH-DG (xxx=560-575, in step of 5);  
 VSUNxxxN-132BMH-DG (xxx=515-525, in step of 5);  
 VSUNxxxN-120BMH-DG (xxx=470-475, in step of 5);  
 VSUNxxxN-108BMH-DG (xxx=415-430, in step of 5).  
 xxx is standing for rated output power at STC.

**Parameters:**

Safety Class:	Class II
Max. System Voltage:	1500V DC
Test Laboratory:	Changzhou HuaYang Inspection and Testing Technology No.8 Lanxiang Road, Wujin Economic Development Zone, Changzhou, Jiangsu, China.
Construction:	Framed, with Junction box, cable and connector.
Fire Safety Class:	Class A or C according to UL790

**Tested according to:**

IEC 61215-1(ed.1)  
 IEC 61215-1-1(ed.1)  
 IEC 61215-2(ed.1)  
 IEC 61730-1(ed.2)  
 IEC 61730-2(ed.2)



# Product Carbon Footprint Verification Statement <sup>China</sup>

## No. P2GHG 092954 0044 Rev. 00

<b>Client:</b>	<b>VIETNAM SUNERGY JOINT STOCK COMPANY</b> Lot III-Dong Vang Area Dinh Tram Industrial Zone Hoang Ninh Commune Viet Yen District 236355 Bac Giang Province VIETNAM
<b>Responsible Party:</b>	VIETNAM SUNERGY JOINT STOCK COMPANY Lot III-Dong Vang Area, Dinh Tram Industrial Zone, Hoang Ninh Commune, Viet Yen District, 236355 Bac Giang Province, VIETNAM
<b>Product Name:</b>	<b>Crystalline Silicon Terrestrial Photovoltaic (PV) Modules Crystalline Silicon Photovoltaic Module</b>
<b>Functional Unit:</b>	1kw of manufactured crystalline silicone photovoltaic module
<b>System Boundary:</b>	Cradle to Gate
<b>Time Period:</b>	2021-12-24 to 2022-12-31
<b>Level of Assurance:</b>	Reasonable assurance level
<b>Materiality:</b>	5% of total emissions within system boundary
<b>Operation rule:</b>	CCB_GHG_GR_001CS REV.02
<b>Verification Conclusion:</b>	The product carbon footprint verification for the claim by the responsible party is conducted according to ISO 14064-3: 2019. After verification, it confirms that the claim of VIETNAM SUNERGY JOINT STOCK COMPANY that declared the carbon footprint of VSUNxxx-144BMH-DG (xxx=535-550, in steps of 5) which manufactured from 2021-12-24 to 2022-12-31 meets the requirements of ISO 14067:2018. And the product carbon footprint of each power rating of the target product per functional unit are listed as follows. The purpose of the verification is to confirm that the calculation process of carbon emissions for the product by the organization meets the requirements of relevant verification criteria, and the system boundary is from cradle to gate. The data and information supporting the claim is not based on assumptions and predictions, but is based on historical facts.
	The issue of the product carbon footprint verification statement hereon are based upon the claim on greenhouse gases emissions from the responsible party. The responsibility of the claim on greenhouse gases emissions is the responsible party. This statement does not relieve client from compliance with any bylaws, federal, national or regional acts and regulations or with any guidelines issued pursuant to such regulations. Stipulations to the contrary are not binding on TÜV SÜD and TÜV SÜD shall have no responsibility vis-à-vis parties other than responsible party.

**Verification Report No.:** 704062203415-00

**Issue date:** 2023-04-10

( David Bo )



# Product Carbon Footprint Verification Statement <sup>China</sup>

No. P2GHG 092954 0044 Rev. 00

**Product Type:** VSUNxxx-144BMH-DG (xxx=535-550, in steps of 5)  
xxx is standing for rated output power at STC

**Product Carbon Footprint:**

Product Type	Product Carbon Footprint
VSUN535-144BMH-DG	681.67 kgCO <sub>2</sub> eq
VSUN540-144BMH-DG	675.35 kgCO <sub>2</sub> eq
VSUN545-144BMH-DG	669.16 kgCO <sub>2</sub> eq
VSUN550-144BMH-DG	663.08 kgCO <sub>2</sub> eq



Product Service

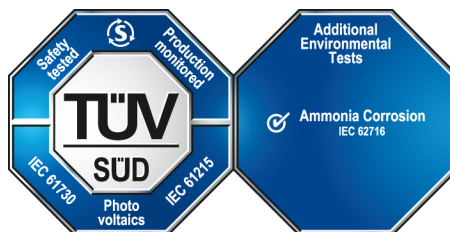
# CERTIFICATE

No. Z2 092954 0037 Rev. 04

**Holder of Certificate:** **VIETNAM SUNERGY  
JOINT STOCK COMPANY**

Lot III-Dong Vang Area  
Dinh Tram Industrial Zone  
Hoang Ninh Commune  
Viet Yen District  
236355 Bac Giang Province  
VIETNAM

**Certification Mark:**



**Product:** **Crystalline Silicon Terrestrial Photovoltaic (PV) Modules  
Mono-crystalline Silicon Photovoltaic Module**

The product was tested on a voluntary basis and complies with the essential requirements. The certification mark shown above can be affixed on the product. It is not permitted to alter the certification mark in any way. In addition, the certification holder must not transfer the certificate to third parties. This certificate is valid until the listed date, unless it is cancelled earlier. All applicable requirements of the testing and certification regulations of TÜV SÜD Group have to be complied. For details see: [www.tuvsud.com/ps-cert](http://www.tuvsud.com/ps-cert)

**Test report no.:** 704062003409-04

**Valid until:** 2028-12-21

**Date,** 2023-12-22

( David Bo )

# CERTIFICATE

No. Z2 092954 0037 Rev. 04

## Model(s):

VSUNxxx-72BMH-DG (xxx=350-395, in step of 5);  
 VSUNxxx-60BMH-DG (xxx=295-335, in step of 5);  
 VSUNxxx-144BMH-DG (xxx=390-415 and xxx=430-450  
 and xxx=530-550, in step of 5);  
 VSUNxxx-132BMH-DG (xxx=485-500, in step of 5);  
 VSUNxxx-120BMH-DG (xxx=325-345 and xxx=360-375  
 and xxx=445-455, in step of 5);  
 VSUNxxx-108BMH-DG (xxx=400-410, in step of 5);  
 VSUNxxx-96BMH-DG (xxx=350-365, in step of 5);  
 VSUNxxxN-156BMH-DG, VSUNxxxN-156BMH-DG-BW,  
 VSUNxxxN-156BMH-DG-BB, VSUNxxxN-156BMH-DG-BT,  
 VSUNxxxN-156BMH-DG-WT (xxx=615-635, in step of 5);  
 VSUNxxxN-144BMH-DG, VSUNxxxN-144BMH-DG-BW,  
 VSUNxxxN-144BMH-DG-BB, VSUNxxxN-144BMH-DG-BT,  
 VSUNxxxN-144BMH-DG-WT (xxx=550-585, in step of 5);  
 VSUNxxxN-132BMH-DG, VSUNxxxN-132BMH-DG-BW,  
 VSUNxxxN-132BMH-DG-BB, VSUNxxxN-132BMH-DG-BT,  
 VSUNxxxN-132BMH-DG-WT (xxx=505-535, in step of 5);  
 VSUNxxxN-120BMH-DG, VSUNxxxN-120BMH-DG-BW,  
 VSUNxxxN-120BMH-DG-BB, VSUNxxxN-120BMH-DG-BT,  
 VSUNxxxN-120BMH-DG-WT (xxx=460-485, in step of 5);  
 VSUNxxxN-108BMH-DG, VSUNxxxN-108BMH-DG-BW,  
 VSUNxxxN-108BMH-DG-BB, VSUNxxxN-108BMH-DG-BT,  
 VSUNxxxN-108BMH-DG-WT (xxx=410-435, in step of 5);  
 VSUNxxxN-96BMH-DG, VSUNxxxN-96BMH-DG-BW,  
 VSUNxxxN-96BMH-DG-BB, VSUNxxxN-96BMH-DG-BT,  
 VSUNxxxN-96BMH-DG-WT (xxx=365-390, in step of 5).  
 xxx is standing for rated output power at STC.

## Parameters:

Safety Class:	Class II
Max. System Voltage:	1500V DC
Construction:	Framed, with Junction box, cable and connector.
Fire Safety Class:	Class A according to UL790

## Tested according to:

IEC 61215-1(ed.1)  
 IEC 61215-1-1(ed.1)  
 IEC 61215-2(ed.1)  
 IEC 61730-1(ed.2)  
 IEC 61730-2(ed.2)  
 IEC 62716(ed.1)

# Compliance Document

No. D 092954 0045 Rev. 00


**Holder of Certificate:** **VIETNAM SUNERGY  
JOINT STOCK COMPANY**  
Lot III-Dong Vang Area  
Dinh Tram Industrial Zone  
Hoang Ninh Commune  
Viet Yen District  
236355 Bac Giang Province  
VIETNAM

**Product:** **Crystalline Silicon Terrestrial Photovoltaic (PV) Modules  
Mono-crystalline Silicon Photovoltaic Module**

This Compliance document confirms the compliance with the listed standards on a voluntary basis. It refers only to the sample submitted for testing and certification and does not certify the quality or safety of the serial products. For details see: [www.tuvsud.com/ps-cert](http://www.tuvsud.com/ps-cert)

**Test report no.:** 704062336008-00

**Date,** 2023-09-20



( David Bo )



# Compliance Document

No. D 092954 0045 Rev. 00

## Model(s):

VSUNxxxN-144BMH-DG, VSUNxxxN-144BMH-DG-BW,  
 VSUNxxxN-144BMH-BB, VSUNxxxN-144BMH-DG-BT,  
 VSUNxxxN-144BMH-DG-WT (xxx=550-575, in step of 5);  
 VSUNxxxN-132BMH-DG, VSUNxxxN-132BMH-DG-BW,  
 VSUNxxxN-132BMH-DG-BB, VSUNxxxN-132BMH-DG-BT,  
 VSUNxxxN-132BMH-DG-WT (xxx=505-525, in step of 5);  
 VSUNxxxN-120BMH-DG, VSUNxxxN-120BMH-DG-BW,  
 VSUNxxxN-120BMH-DG-BB, VSUNxxxN-120BMH-DG-BT,  
 VSUNxxxN-120BMH-DG-WT (xxx=460-475, in step of 5);  
 VSUNxxxN-108BMH-DG, VSUNxxxN-108BMH-DG-BW,  
 VSUNxxxN-108BMH-DG-BB, VSUNxxxN-108BMH-DG-BT,  
 VSUNxxxN-108BMH-DG-WT (xxx=410-430, in step of 5);  
 VSUNxxxN-96BMH-DG, VSUNxxxN-96BMH-DG-BW,  
 VSUNxxxN-96BMH-DG-BB, VSUNxxxN-96BMH-DG-BT,  
 VSUNxxxN-96BMH-DG-WT (xxx=365-380, in step of 5).  
 xxx is standing for rated output power at STC.

## Parameters:

Construction:	Framed, with Junction box, cable and connector.
Safety Class:	Class II
Max. System Voltage:	1500V DC
Remark:	Modules listed above comply with the requirements of being non-sensitive to LeTID

## Tested according to:

IEC TS 63342:2022





Product Service

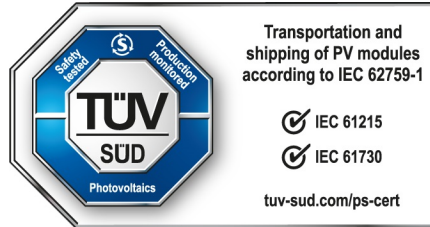
# CERTIFICATE

No. Z2 092954 0047 Rev. 00

**Holder of Certificate:** **VIETNAM SUNERGY  
JOINT STOCK COMPANY**

Lot III-Dong Vang Area  
Dinh Tram Industrial Zone  
Hoang Ninh Commune  
Viet Yen District  
236355 Bac Giang Province  
VIETNAM

**Certification Mark:**



**Product:** **Crystalline Silicon Terrestrial Photovoltaic (PV) Modules  
Mono-crystalline Silicon Photovoltaic module**

The product was tested on a voluntary basis and complies with the essential requirements. The certification mark shown above can be affixed on the product. It is not permitted to alter the certification mark in any way. In addition, the certification holder must not transfer the certificate to third parties. This certificate is valid until the listed date, unless it is cancelled earlier. All applicable requirements of the testing and certification regulations of TÜV SÜD Group have to be complied. For details see: [www.tuvsud.com/ps-cert](http://www.tuvsud.com/ps-cert)

**Test report no.:** 704062336017-00

**Valid until:** 2028-11-21

**Date,** 2023-11-23

( David Bo )

# CERTIFICATE

No. Z2 092954 0047 Rev. 00

## Model(s):

VSUNxxxN-156BMH-DG, VSUNxxxN-156BMH-DG-BW,  
 VSUNxxxN-156BMH-DG-BB, VSUNxxxN-156BMH-DG-BT,  
 VSUNxxxN-156BMH-DG-WT (xxx=615-635, in step of 5);  
 VSUNxxxN-144BMH-DG, VSUNxxxN-144BMH-DG-BW,  
 VSUNxxxN-144BMH-DG-BB, VSUNxxxN-144BMH-DG-BT,  
 VSUNxxxN-144BMH-DG-WT (xxx=550-585, in step of 5);  
 VSUNxxxN-132BMH-DG, VSUNxxxN-132BMH-DG-BW,  
 VSUNxxxN-132BMH-DG-BB, VSUNxxxN-132BMH-DG-BT,  
 VSUNxxxN-132BMH-DG-WT (xxx=505-535, in step of 5);  
 VSUNxxxN-120BMH-DG, VSUNxxxN-120BMH-DG-BW,  
 VSUNxxxN-120BMH-DG-BB, VSUNxxxN-120BMH-DG-BT,  
 VSUNxxxN-120BMH-DG-WT (xxx=460-485, in step of 5);  
 VSUNxxxN-108BMH-DG, VSUNxxxN-108BMH-DG-BW,  
 VSUNxxxN-108BMH-DG-BB, VSUNxxxN-108BMH-DG-BT,  
 VSUNxxxN-108BMH-DG-WT (xxx=410-435, in step of 5);  
 VSUNxxxN-96BMH-DG, VSUNxxxN-96BMH-DG-BW,  
 VSUNxxxN-96BMH-DG-BB, VSUNxxxN-96BMH-DG-BT,  
 VSUNxxxN-96BMH-DG-WT (xxx=365-390, in step of 5).  
 xxx is standing for rated output power at STC.

## Parameters:

Safety Class:	Class II
Max. System Voltage:	1500V DC
Construction:	Framed, with Junction box, cable and connector.
Fire Safety Class:	Class A or C according to UL790
Modules in a complete shipping unit:	30 pcs

## Tested according to:

IEC 61215-1:2016  
 IEC 61215-1-1:2016  
 IEC 61215-2:2016  
 IEC 61730-1:2016  
 IEC 61730-2:2016  
 IEC 62759-1:2022



Product Service

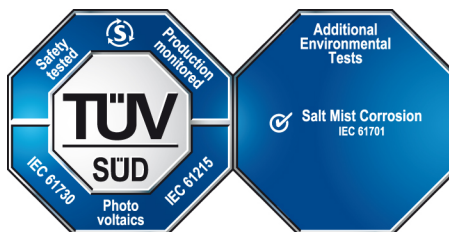
# CERTIFICATE

No. Z2 092954 0038 Rev. 03

**Holder of Certificate:** **VIETNAM SUNERGY  
JOINT STOCK COMPANY**

Lot III-Dong Vang Area  
Dinh Tram Industrial Zone  
Hoang Ninh Commune  
Viet Yen District  
236355 Bac Giang Province  
VIETNAM

**Certification Mark:**



**Product:** **Crystalline Silicon Terrestrial Photovoltaic (PV) Modules  
Mono-crystalline Silicon Photovoltaic Module**

The product was tested on a voluntary basis and complies with the essential requirements. The certification mark shown above can be affixed on the product. It is not permitted to alter the certification mark in any way. In addition, the certification holder must not transfer the certificate to third parties. This certificate is valid until the listed date, unless it is cancelled earlier. All applicable requirements of the testing and certification regulations of TÜV SÜD Group have to be complied. For details see: [www.tuvsud.com/ps-cert](http://www.tuvsud.com/ps-cert)

**Test report no.:** 704062003408-03

**Valid until:** 2028-11-09

**Date,** 2023-11-10

( David Bo )

# CERTIFICATE

No. Z2 092954 0038 Rev. 03

## Model(s):

### Test method 6 of salt mist:

VSUNxxx-72BMH-DG (xxx=350-395, in step of 5);  
 VSUNxxx-60BMH-DG (xxx=295-335, in step of 5);  
 VSUNxxx-144BMH-DG  
 (xxx=390-415 and xxx=430-450 and xxx=530-550, in step of 5);  
 VSUNxxx-132BMH-DG (xxx=485-500, in step of 5);  
 VSUNxxx-120BMH-DG  
 (xxx=325-345 and xxx=360-375 and xxx=445-455, in step of 5);  
 VSUNxxx-108BMH-DG (xxx=400-410, in step of 5);  
 VSUNxxx-96BMH-DG (xxx=350-365, in step of 5);

### Test method 8 of salt mist:

VSUNxxx-144BMH-DG (xxx=530-550, in step of 5);  
 VSUNxxx-132BMH-DG (xxx=485-500, in step of 5);  
 VSUNxxx-120BMH-DG (xxx=445-455, in step of 5);  
 VSUNxxx-108BMH-DG (xxx=400-410, in step of 5);  
 VSUNxxx-96BMH-DG (xxx=350-365, in step of 5);  
 VSUNxxxN-156BMH-DG, VSUNxxxN-156BMH-DG-BW,  
 VSUNxxxN-156BMH-DG-BB, VSUNxxxN-156BMH-DG-BT,  
 VSUNxxxN-156BMH-DG-WT (xxx=615-635, in step of 5);  
 VSUNxxxN-144BMH-DG, VSUNxxxN-144BMH-DG-BW,  
 VSUNxxxN-144BMH-DG-BB, VSUNxxxN-144BMH-DG-BT,  
 VSUNxxxN-144BMH-DG-WT (xxx=550-585, in step of 5);  
 VSUNxxxN-132BMH-DG, VSUNxxxN-132BMH-DG-BW,  
 VSUNxxxN-132BMH-DG-BB, VSUNxxxN-132BMH-DG-BT,  
 VSUNxxxN-132BMH-DG-WT (xxx=505-535, in step of 5);  
 VSUNxxxN-120BMH-DG, VSUNxxxN-120BMH-DG-BW,  
 VSUNxxxN-120BMH-DG-BB, VSUNxxxN-120BMH-DG-BT,  
 VSUNxxxN-120BMH-DG-WT (xxx=460-485, in step of 5);  
 VSUNxxxN-108BMH-DG, VSUNxxxN-108BMH-DG-BW,  
 VSUNxxxN-108BMH-DG-BB, VSUNxxxN-108BMH-DG-BT,  
 VSUNxxxN-108BMH-DG-WT (xxx=410-435, in step of 5);  
 VSUNxxxN-96BMH-DG, VSUNxxxN-96BMH-DG-BW,  
 VSUNxxxN-96BMH-DG-BB, VSUNxxxN-96BMH-DG-BT,  
 VSUNxxxN-96BMH-DG-WT (xxx=365-390, in step of 5).  
 xxx is standing for rated output power at STC.

## Parameters:

Safety Class:	Class II
Max. System Voltage:	1500V DC
Construction:	Framed, with Junction box, cable and connector.
Fire Safety Class:	Class A according to UL790
Test method of salt mist:	Test method 8 or Test method 6

## Tested according to:

IEC 61215-1:2016  
 IEC 61215-1-1:2016  
 IEC 61215-2:2016  
 IEC 61730-1:2016  
 IEC 61730-2:2016  
 IEC 61701:2020



Product Service

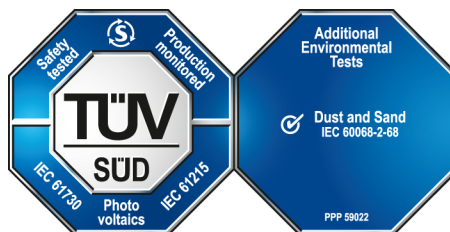
# CERTIFICATE

No. Z2 092954 0036 Rev. 05

**Holder of Certificate:** **VIETNAM SUNERGY  
JOINT STOCK COMPANY**

Lot III-Dong Vang Area  
Dinh Tram Industrial Zone  
Hoang Ninh Commune  
Viet Yen District  
236355 Bac Giang Province  
VIETNAM

**Certification Mark:**



**Product:** **Crystalline Silicon Terrestrial Photovoltaic (PV) Modules  
Mono-crystalline Silicon Photovoltaic Module**

The product was tested on a voluntary basis and complies with the essential requirements. The certification mark shown above can be affixed on the product. It is not permitted to alter the certification mark in any way. In addition, the certification holder must not transfer the certificate to third parties. This certificate is valid until the listed date, unless it is cancelled earlier. All applicable requirements of the testing and certification regulations of TÜV SÜD Group have to be complied. For details see: [www.tuvsud.com/ps-cert](http://www.tuvsud.com/ps-cert)

**Test report no.:** 704062003413-05

**Valid until:** 2028-12-21

**Date,** 2023-12-22

( David Bo )

# CERTIFICATE

No. Z2 092954 0036 Rev. 05

## Model(s):

VSUNxxx-72BMH-DG (xxx=350-395, in step of 5);  
 VSUNxxx-60BMH-DG (xxx=295-335, in step of 5);  
 VSUNxxx-144BMH-DG  
 (xxx=390-415, xxx=430-450 and xxx=530-550, in step of 5);  
 VSUNxxx-132BMH-DG (xxx=485-500, in step of 5);  
 VSUNxxx-120BMH-DG  
 (xxx=325-345, xxx=360-375 and xxx=445-455, in step of 5);  
 VSUNxxx-108BMH-DG (xxx=400-410, in step of 5);  
 VSUNxxx-96BMH-DG (xxx=350-365, in step of 5);  
 VSUNxxxN-156BMH-DG, VSUNxxxN-156BMH-DG-BW,  
 VSUNxxxN-156BMH-DG-BB, VSUNxxxN-156BMH-DG-BT,  
 VSUNxxxN-156BMH-DG-WT (xxx=615-635, in step of 5);  
 VSUNxxxN-144BMH-DG, VSUNxxxN-144BMH-DG-BW,  
 VSUNxxxN-144BMH-DG-BB, VSUNxxxN-144BMH-DG-BT,  
 VSUNxxxN-144BMH-DG-WT (xxx=550-585, in step of 5);  
 VSUNxxxN-132BMH-DG, VSUNxxxN-132BMH-DG-BW,  
 VSUNxxxN-132BMH-DG-BB, VSUNxxxN-132BMH-DG-BT,  
 VSUNxxxN-132BMH-DG-WT (xxx=505-535, in step of 5);  
 VSUNxxxN-120BMH-DG, VSUNxxxN-120BMH-DG-BW,  
 VSUNxxxN-120BMH-DG-BB, VSUNxxxN-120BMH-DG-BT,  
 VSUNxxxN-120BMH-DG-WT (xxx=460-485, in step of 5);  
 VSUNxxxN-108BMH-DG, VSUNxxxN-108BMH-DG-BW,  
 VSUNxxxN-108BMH-DG-BB, VSUNxxxN-108BMH-DG-BT,  
 VSUNxxxN-108BMH-DG-WT (xxx=410-435, in step of 5);  
 VSUNxxxN-96BMH-DG, VSUNxxxN-96BMH-DG-BW,  
 VSUNxxxN-96BMH-DG-BB, VSUNxxxN-96BMH-DG-BT,  
 VSUNxxxN-96BMH-DG-WT (xxx=365-390, in step of 5).  
 xxx is standing for rated output power at STC.

## Parameters:

Safety Class:	Class II
Max. System Voltage:	1500 V DC
Construction:	Framed, with Junction box, cable and connector.
Fire Safety Class:	Class A or C according to UL790

## Tested according to:

IEC 61215-1(ed.1)  
 IEC 61215-1-1(ed.1)  
 IEC 61215-2(ed.1)  
 IEC 61730-1(ed.2)  
 IEC 61730-2(ed.2)  
 PPP 59022B:2021



Product Service

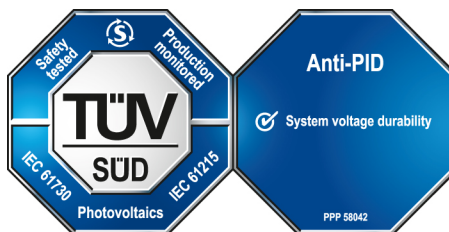
# CERTIFICATE

No. Z2 092954 0027 Rev. 03

**Holder of Certificate:** **VIETNAM SUNERGY  
JOINT STOCK COMPANY**

Lot III-Dong Vang Area  
Dinh Tram Industrial Zone  
Hoang Ninh Commune  
Viet Yen District  
236355 Bac Giang Province  
VIETNAM

**Certification Mark:**



**Product:** **Crystalline Silicon Terrestrial Photovoltaic (PV) Modules  
Mono-crystalline Silicon Photovoltaic module**

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**Test report no.:** 704061902109-03

**Valid until:** 2028-09-06

**Date,** 2023-09-08

( David Bo )

# CERTIFICATE

No. Z2 092954 0027 Rev. 03

## Model(s):

**Test condition: -1500V, 96h, 85 °C, 85 % RH.**  
 VSUNxxx-72BMH-DG (xxx=350-395, in step of 5);  
 VSUNxxx-60BMH-DG (xxx=295-335, in step of 5);  
 VSUNxxx-144BMH-DG (xxx=390-415, in step of 5);  
 VSUNxxx-120BMH-DG (xxx=325-345, in step of 5);

**Test condition: -1500V, 192h, 85 °C, 85 % RH.**  
 VSUNxxx-144BMH-DG  
 (xxx=430-450 and xxx=530-550, in step of 5);  
 VSUNxxx-120BMH-DG  
 (xxx=360-375 and xxx=445-455 and xxx=595-610, in step of 5);  
 VSUNxxx-132BMH-DG  
 (xxx=485-500 and xxx=645-670, in step of 5);  
 VSUNxxx-108BMH-DG (xxx=400-410, in step of 5).  
 VSUNxxx-96BMH-DG (xxx=350-365, in step of 5);  
 VSUNxxxN-144BMH-DG, VSUNxxxN-144BMH-DG-BW,  
 VSUNxxxN-144BMH-BB, VSUNxxxN-144BMH-DG-BT,  
 VSUNxxxN-144BMH-DG-WT (xxx=550-575, in step of 5);  
 VSUNxxxN-132BMH-DG, VSUNxxxN-132BMH-DG-BW,  
 VSUNxxxN-132BMH-DG-BB, VSUNxxxN-132BMH-DG-BT,  
 VSUNxxxN-132BMH-DG-WT (xxx=505-525, in step of 5);  
 VSUNxxxN-120BMH-DG, VSUNxxxN-120BMH-DG-BW,  
 VSUNxxxN-120BMH-DG-BB, VSUNxxxN-120BMH-DG-BT,  
 VSUNxxxN-120BMH-DG-WT (xxx=460-475, in step of 5);  
 VSUNxxxN-108BMH-DG, VSUNxxxN-108BMH-DG-BW,  
 VSUNxxxN-108BMH-DG-BB, VSUNxxxN-108BMH-DG-BT,  
 VSUNxxxN-108BMH-DG-WT (xxx=410-430, in step of 5);  
 VSUNxxxN-96BMH-DG, VSUNxxxN-96BMH-DG-BW,  
 VSUNxxxN-96BMH-DG-BB, VSUNxxxN-96BMH-DG-BT,  
 VSUNxxxN-96BMH-DG-WT (xxx=365-380, in step of 5).  
 xxx is standing for rated output power at STC.

## Parameters:

Safety Class:	Class II
Max. System Voltage:	1500V DC
Construction:	Framed, with Junction box, cable and connector.
Fire Safety Class:	Class A according to UL790

## Tested according to:

IEC 61215-1(ed.1)  
 IEC 61215-1-1(ed.1)  
 IEC 61215-2(ed.1)  
 IEC 61730-1(ed.2)  
 IEC 61730-2(ed.2)  
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