CERTIFICATE

Issued to:
Applicant:
Chint New Energy Technology Co., Ltd.
No. 1 Jisheng Road, Jianshan New Zone
314415 Haining City Zhejiang, China

Licensee:
Chint New Energy Technology Co., Ltd.
No. 1 Jisheng Road, Jianshan New Zone
314415 Haining City Zhejiang, China

Product	:	Photovoltaic (PV) Module(s)
Trade name(s)	:	ASTRONERGY
Type(s)/model(s)	:	PV module with mono c-Si cells

The product and any acceptable variation thereof as specified in the Annex to this certificate and the documents referred to therein.

DEKRA hereby declares that the above-mentioned product has been certified based on:
- an evaluation according to the standard(s) IEC 62716:2013 and EN 62716:2013
- a periodic surveillance
- a DEKRA certification agreement with the number 6062183

DEKRA hereby grants the right to use the DEKRA Seal certification mark with the following content:

Category	:	Photovoltaic
Keyword	:	Ammonia Resistance
Keyword	:	Periodic Factory Inspection

The DEKRA Seal certification mark may be applied to the product or documentation as specified in this certificate for the duration and under the conditions of the DEKRA Seal certification agreement.

This certificate is issued on 11 December 2024 and expires at the latest on 12 August 2026.

Certificate number: 31-120279 REV.9

DEKRA Certification B.V.

B.T.M. Holtus
Managing Director

H.R.M. Barends
Certification Manager

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31-120279

SPECIFICATION OF THE CERTIFIED PRODUCT

Product data

Product	:	Photovoltaic (PV) Module(s)
Trade name(s)	:	ASTRONERGY
Type(s)/model(s)	:	CHSM09Ns(DG)(BLH)/F-BH-xxx, CHSM48M(DGT)/F-BH-xxx, CHSM48N(DGT)/F-BH-xxx, CHSM48RN(DG)(BLH)/F-BH-xxx, CHSM48RN(DG)/F-BH-xxx, CHSM48RN(DGT)(BLH)/F-BH-xxx, CHSM50M(DG)/F-BH-xxx, CHSM54M(DG)-BH-xxx, CHSM54M(DG)/F-BH-xxx, CHSM54M(DG)/F-HC-xxx, CHSM54M(DGT)-BH-xxx, CHSM54M(DGT)/F-BH-xxx, CHSM54N(DG)/F-BH-xxx, CHSM54N(DG)/F-HC-xxx, CHSM54N(DGT)(BLH)/F-BH-xxx, CHSM54N(DGT)/F-BH-xxx, CHSM54RN(DG)/F-BH-xxx, CHSM54RN(DG)/F-HC-xxx, CHSM54RN(DGT)(BLH)/F-BH-xxx, CHSM54RNs(DG)(BLH)/F-BH-xxx, CHSM54RNs(DG)/F-BH-xxx, CHSM54RNs(DG)/F-HC-xxx, CHSM54RNs(DGT)(BLH)/F-BH-xxx, CHSM54RNs(DGT)/F-BH-xxx, CHSM55M(DG)/F-BH-xxx, CHSM60M(DG)-BH-xxx, CHSM60M(DG)/F-BH-xxx, CHSM60M(DG)/F-HC-xxx, CHSM60M(DGT)-BH-xxx, CHSM60M(DGT)/F-BH-xxx, CHSM60N(DG)/F-BH-xxx, CHSM60N(DG)/F-HC-xxx, CHSM60N(DGT)/F-BH-xxx, CHSM60RNs(DG)(BLH)/F-BH-xxx, CHSM60RNs(DG)/F-BH-xxx, CHSM60RNs(DGT)(BLH)/F-BH-xxx, CHSM66M(DG)-BH-xxx, CHSM66M(DG)/F-BH-xxx, CHSM66M(DGT)-BH-xxx, CHSM66M(DGT)/F-BH-xxx, CHSM66N(DG)/F-BH-xxx, CHSM66RN(DG)/F-BH-xxx, CHSM66RN(DG)/F-HC-xxx, CHSM72M(DG)-BH-xxx, CHSM72M(DG)/F-BH-xxx, CHSM72M(DG)/F-HC-xxx, CHSM72M(DGT)-BH-xxx, CHSM72M(DGT)/F-BH-xxx, CHSM72N(DG)/F-BH-IA-xxx, CHSM72N(DG)/F-BH-xxx, CHSM72N(DG)/F-HC-xxx, CHSM72N(DGT)/F-BH-xxx, CHSM72RN(DG)/F-BH-xxx, CHSM72RN(DG)/F-HC-xxx, CHSM78M(DG)/F-BH-xxx, CHSM78M(DG)/F-HC-xxx, CHSM78N(DG)/F-BH-IA-xxx, CHSM78N(DG)/F-BH-xxx and CHSM78N(DG)/F-HC-xxx
Maximum system voltage	:	1500V
Design	:	PV module with mono c-Si cells

Product data – type CHSM09Ns(DG)(BLH)/F-BH-xxx

Description	:	xxx=65-70, in steps of 5, 18 cells

Product data – type CHSM48M(DGT)/F-BH-xxx

Description	:	xxx=340-370, in steps of 5, 96 cells

Product data – type CHSM48N(DGT)/F-BH-xxx

Description	:	xxx=345-380, in steps of 5, 96 cells

Product data – type CHSM48RN(DG)(BLH)/F-BH-xxx

Description	:	xxx=440-455, in steps of 5, 108 cells

Product data – type CHSM48RN(DG)/F-BH-xxx
Description : xxx=440-460, in steps of 5, 108 cells

Product data – type CHSM48RN(DGT)(BLH)/F-BH-xxx
Description : xxx=440-455, in steps of 5, 108 cells

Product data – type CHSM50M(DG)/F-BH-xxx
Description : xxx=485-510, in steps of 5, 100 cells

Product data – type CHSM54M(DG)/F-BH-xxx
Description : xxx=390-420, in steps of 5, 108 cells

Product data – type CHSM54M(DG)/F-HC-xxx
Description : xxx=405-425, in steps of 5, 108 cells

Product data – type CHSM54M(DG)-BH-xxx
Description : xxx=390-420, in steps of 5, 108 cells

Product data – type CHSM54M(DGT)/F-BH-xxx
Description : xxx=380-420, in steps of 5, 108 cells

Product data – type CHSM54M(DGT)-BH-xxx
Description : xxx=380-420, in steps of 5, 108 cells

Product data – type CHSM54N(DG)/F-BH-xxx
Description : xxx=405-455, in steps of 5, 108 cells

Product data – type CHSM54N(DG)/F-HC-xxx
Description : xxx=415-455, in steps of 5, 108 cells

Product data – type CHSM54N(DGT)(BLH)/F-BH-xxx
Description : xxx=395-450, in steps of 5, 108 cells

Product data – type CHSM54N(DGT)/F-BH-xxx
Description : xxx=395-450, in steps of 5, 108 cells

Product data – type CHSM54RN(DG)/F-BH-xxx
Description : xxx=435-465, in steps of 5, 108 cells
xxx=495-515, in steps of 5, 108 cells

Product data – type CHSM54RN(DG)/F-HC-xxx
Description : xxx=440-470, in steps of 5, 108 cells

Product data – type CHSM54RN(DGT)(BLH)/F-BH-xxx
Description : xxx=495-515, in steps of 5, 108 cells

Product data – type CHSM54RNs(DG)(BLH)/F-BH-xxx
Description : xxx=425-455, in steps of 5, 108 cells

Product data – type CHSM54RNs(DG)/F-BH-xxx
Description : xxx=430-460, in steps of 5, 108 cells

Product data – type CHSM54RNs(DG)/F-HC-xxx
Description : xxx=430-460, in steps of 5, 108 cells

Product data – type CHSM54RNs(DGT)(BLH)/F-BH-xxx
Description : xxx=425-460, in steps of 5, 108 cells

Product data – type CHSM54RNs(DGT)/F-BH-xxx
Description : xxx=430-460, in steps of 5, 108 cells

Product data – type CHSM55M(DG)/F-BH-xxx
Description : xxx=530-565, in steps of 5, 110 cells

Product data – type CHSM60M(DG)/F-BH-xxx
Description : xxx=305-380, in steps of 5, 120 cells
xxx=430-470, in steps of 5, 120 cells
xxx=580-610, in steps of 5, 120 cells

Product data – type CHSM60M(DG)/F-HC-xxx
Description : xxx=450-475, in steps of 5, 120 cells

Product data – type CHSM60M(DG)-BH-xxx
Description : xxx=305-380, in steps of 5, 120 cells

Product data – type CHSM60M(DGT)/F-BH-xxx
Description : xxx=295-370, in steps of 5, 120 cells

Product data – type CHSM60M(DGT)-BH-xxx
Description : xxx=295-370, in steps of 5, 120 cells

Product data – type CHSM60N(DG)/F-BH-xxx
Description : xxx=595-630, in steps of 5, 120 cells
xxx=450-505, in steps of 5, 120 cells

Product data – type CHSM60N(DG)/F-HC-xxx
Description : xxx=460-505, in steps of 5, 120 cells

Product data – type CHSM60N(DGT)/F-BH-xxx
Description : xxx=440-500, in steps of 5, 120 cells

Product data – type CHSM60RNs(DG)(BLH)/F-BH-xxx
Description : xxx=480-515, in steps of 5, 120 cells

Product data – type CHSM60RNs(DG)/F-BH-xxx
Description : xxx=475-515, in steps of 5, 120 cells

Product data – type CHSM60RNs(DGT)(BLH)/F-BH-xxx
Description : xxx=480-515, in steps of 5, 120 cells

Product data – type CHSM66M(DG)/F-BH-xxx
Description : xxx=475-515, in steps of 5, 132 cells
xxx=635-675, in steps of 5, 132 cells

Product data – type CHSM66M(DG)-BH-xxx
Description : xxx=475-515, in steps of 5, 132 cells

Product data – type CHSM66M(DGT)/F-BH-xxx
Description : xxx=465-515, in steps of 5, 132 cells

Product data – type CHSM66M(DGT)-BH-xxx
Description : xxx=465-515, in steps of 5, 132 cells

Product data – type CHSM66N(DG)/F-BH-xxx
Description : xxx=650-725, in steps of 5, 132 cells

Product data – type CHSM66RN(DG)/F-BH-xxx
Description : xxx=585-635, in steps of 5, 132 cells

Product data – type CHSM66RN(DG)/F-HC-xxx
Description : xxx=585-625, in steps of 5, 132 cells

Product data – type CHSM72M(DG)/F-BH-xxx
Description : xxx=365-455, in steps of 5, 144 cells
xxx=515-565, in steps of 5, 144 cells

Product data – type CHSM72M(DG)/F-HC-xxx
Description : xxx=535-570, in steps of 5, 144 cells

Product data – type CHSM72M(DG)-BH-xxx
Description : xxx=365-455, in steps of 5, 144 cells
xxx=515-565, in steps of 5, 144 cells

Product data – type CHSM72M(DGT)/F-BH-xxx
Description : xxx=355-445, in steps of 5, 144 cells
xxx=505-565, in steps of 5, 144 cells

Product data – type CHSM72M(DGT)-BH-xxx
Description : xxx=355-445, in steps of 5, 144 cells
xxx=505-565, in steps of 5, 144 cells

Product data – type CHSM72N(DG)/F-BH-IA-xxx
Description : xxx=535-610, in steps of 5, 144 cells

Product data – type CHSM72N(DG)/F-BH-xxx
Description : xxx=535-610, in steps of 5, 144 cells

Product data – type CHSM72N(DG)/F-HC-xxx
Description : xxx=550-610, in steps of 5, 144 cells

Product data – type CHSM72N(DGT)/F-BH-xxx
Description : xxx=525-600, in steps of 5, 144 cells

Product data – type CHSM72RN(DG)/F-BH-xxx
Description : xxx=580-625, in steps of 5, 144 cells

Product data – type CHSM72RN(DG)/F-HC-xxx
Description : xxx=585-630, in steps of 5, 144 cells

Product data – type CHSM78M(DG)/F-BH-xxx
Description : xxx=580-605, in steps of 5, 156 cells

Product data – type CHSM78M(DG)/F-HC-xxx
Description : xxx=580-615, in steps of 5, 156 cells

Product data – type CHSM78N(DG)/F-BH-IA-xxx
Description : xxx=580-650, in steps of 5, 156 cells

Product data – type CHSM78N(DG)/F-BH-xxx
Description : xxx=580-650, in steps of 5, 156 cells

Product data – type CHSM78N(DG)/F-HC-xxx
Description : xxx=590-665, in steps of 5, 156 cells

TESTS

Test requirements
IEC 62716:2013
EN 62716:2013

Test result
The test results are documented in DEKRA test file 620848100.

Additional information
This certificate replaces certificate No. 31-120279 REV.8 which we hereby declare invalid.

The list of components is laid down in test report 6208481D.50.

Conclusion
The examination has confirmed that all requirements were met.

Factory locations
Chint New Energy Technology (Yancheng) Co., Ltd.
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ASTRONERGY SOLAR PANEL URETIM VE TICARET ANONIM SIRKETI ADANA SUBESI
ACIDEREOSB MAH. SEDEF CAD. NO: 1 SARICAM
01900 Adana, Türkiye

Trade name(s): ASTRONERGY stands for

Unique Identifier

