

Gams 01. September 2023

## KONFORMITÄTSERKLÄRUNG

Gegenstand der Erklärung:

# BALKONKRAFTWERK-SET SOLYCO 1500Wp/1200W (600W Plug & Play)

Das besagte Gerät erfüllt sämtliche grundlegenden Voraussetzungen gemäß den schweizerischen Gesetzen und Normen für elektrische Sicherheit (NEV; SR 734.26) und elektromagnetische Verträglichkeit (VEMV; SR 734.5). Konform nach ESTI-Mitteilung 07/2014.

### Dazu angewandte Normen:

#### **PV Module: Solyco R-WF 120p.2 CH/370-380**

IEC 61215-1:2016 / EN61215-1:2016 / IEC 61215-1-1:2016

NE 61215-1-1:2016 / IEC 61215-2:2016 / NE 61215-2:2017 / IEC 61730-1:2016

EN IEC 61730-1:2018 / IEC C61730-2:2016 / EN IEC 6C1730-2:2018

#### **Micro-Wechselrichter: Hoymiles HM-1200**

VDE-AR-N 4105:2018-11 / DIN VDE V 0124-100 (VDE V 0124-100):2019-09  
EN 50549-1:2019

#### **Stecker:**

CH TYP23, IP44



Patrick Wilhelm, Geschäftsführer



# CERTIFICATE

Certificate number	17153 Rev.0	Replaces	-
Issued	13/09/2022	First edition	13/09/2022
Report number	PKC0011846	Expiry date	15/11/2026
Page	1 of 2	Contract number	PKC0011870

## Product Certificate Photovoltaic (PV) Panels

<b>License holder:</b>	<b>SOLYCO Solar AG</b> Baseler Str. 60, 12205 Berlin - Germany
<b>Production site (1):</b>	Vesne Parun 15, HR-42000 Varaždin, Croatia
<b>Production site (2):</b>	Ivane Brlić Mažuranić 25, HR-42000 Varaždin, Croatia
<b>Model(s):</b>	R-WF 120p.2 CH/XXX (see extended models in the Annex)*

The product as listed in this certificate and marked with the below given Kiwa Cermet Italia mark for Photovoltaic (PV) Panels, can be considered complying to the requirements of Kiwa Cermet Italia Guideline "TD Ki – 0409, Solar Products and Components" based upon the following aspects:

Laboratory testing of the panels, which are performed by an accredited laboratory in accordance to ISO/IEC 17025 -see annex-, using the following standards:

- IEC 61215-1:2016 / EN 61215-1:2016  
Terrestrial photovoltaic (PV) modules – Design qualification and type approval – Part 1: Test requirements
- IEC 61215-1-1:2016 / EN 61215-1-1:2016  
Terrestrial photovoltaic (PV) modules – Design qualification and type approval – Part 1-1: Special requirements for testing of crystalline silicon photovoltaic (PV) modules
- IEC 61215-2:2016 / EN 61215-2:2017  
Terrestrial photovoltaic (PV) modules – Design qualification and type approval – Part 2: Test procedures
- IEC 61730-1:2016 / EN IEC 61730-1:2018  
Photovoltaic (PV) module safety qualification – Part 1: Requirements for construction
- IEC 61730-2:2016 / EN IEC 61730-2:2018  
Photovoltaic (PV) module safety qualification – Part 2: Requirements for testing

**Remarks:** to be used in plants at a maximum system voltage (Voc at STC) up to 1500 Vdc (Class II); fire test (IEC 61730-2 / MST 23 – Class C) was performed.

Periodic Inspection of the Factory site(s), according to "TD Ki – 0409", which includes:

- inspection of the manufacturing quality control and production procedures;
- inspection of the produced panels and confirmation that these are identical to the tested panels;
- periodic verification of the manufacturer test facilities.

*This certificate is issued in accordance with the Kiwa Cermet Italia regulations.*

*Publication of the certificate is allowed.*

*The validity of this certificate is subject to the positive result of periodic surveillance visits.*

*The validity of this certificate can be verified on request at the following e-mail address: [energy@kiwacermet.it](mailto:energy@kiwacermet.it)*

*Any total or partial reproduction of this document in any form, without Kiwa Cermet Italia express authorization, is prohibited.*

**Kiwa Cermet Italia S.p.A.**  
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President  
Giampiero Belcredi



PRD N° 069B

Membro degli Accordi di Mutuo Riconoscimento EA, IAF e ILAC  
Signatory of EA, IAF and ILAC Mutual Recognition Agreements







Certificate number 17153 Rev.0 Replaces -  
 Issued 13/09/2022 First edition 13/09/2022  
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 Page 2 of 2 Contract number PKC0011870

## Product Certificate Photovoltaic (PV) Panels

### Annex Extended models\*

Model name	Cells number	Cell size (mm)	Cell technology	Module size <sup>1</sup> (mm)	Rated power (Wp)
R-WF 120p.2 CH/XXX	120	166x83	Mono-Si	1755x1038x35	From 355 to 375 in steps of 5

**Remarks:** XXX = rated power. Modules with white backsheet.

<sup>1</sup>Maximum allowed dimensions: length 2513 mm; width 1246 mm; area 2,61 m<sup>2</sup> (length x width = must not exceed max area 2,61 m<sup>2</sup>).

<sup>1</sup> Minimum allowed dimensions :

- Length : - 2 mm starting from the above listed dimensions
- Width : - 2 mm starting from the above listed dimensions

President  
Giampiero Belcredi

Laboratory test reports nr.: L0005032 rev.00; L0005096/A rev.00; L0005096/B rev.00; 948.0CI0262/21; 2.00.80564.1.0-05a, L0011144/A rev.00, L0011144/B, L0011144/C rev.00, L0005276 rev.00, L0011637/A rev.01; L0011637/B rev.01.

# CERTIFICATE

Kiwa Cermet Italia S.p.A.  
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# EU-Type Examination Certificate

CE



*Beis*





BV LCIE  
CHINA  
Number

N° 2066AS05BMH35313

## ATTESTATION of conformity with European Directives

*Product:* PV Microinverter (Grid-tied photovoltaic Microinverter)  
*Reference:* HM-1500、HM-1200、HM-1000、HM-1500T、HM-1200T、HM-1000T、HM-800T、HM-800、HM-700、HM-700T、HM-600、HM-600T、HM-500、HM-500T、HM-250、HM-250A、HM-250T、HM-300、HM-300A、HM-300T、HM-350、HM-350A、HM-350T、HM-400、HM-400A、HM-400T、HM-450、HM-450A、HM-450T  
*Issued to:* Hoymiles Converter Technology Co., Ltd.  
*Address:* No. 18 Kangjing Road, HangZhou, Zhejiang Province  
*Technical characteristics:* See Next Page

The submitted sample of the above equipment has been tested for **CE** marking according to following European Directive and following standards:

Low Voltage Directive 2014/35/EU

Standards	Report number	Report date
EN 50549-1:2019	BMH-ESH-P200408503-1	20/04/2020
	BMH-ESH-P200408503-2	12/05/2020
	BMH-ESH-P200408503-3	19/05/2020

The referred test report(s) show that the product complies with standard(s) recognized as giving presumption of compliance with the essential requirements in the specified European Directive

This verification does not imply assessment of the production of the product  
The **CE** marking may be affixed if all relevant and effective European Directives with **CE** are applicable

Shanghai (P.R. China), ), May 28<sup>th</sup>, 2020.



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Information given in this document, are related to the tested specimen of the described electrical sample.

LCIE CHINA  
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LCIE

BV LCIE  
CHINA  
Number

N° 2066AS05BMH35313

Model / Type.....:	HM-1500 HM-1500T	HM-1200 HM-1200T	HM-1000 HM-1000T
Range of Peak Power MPPT Voltage.....:	36-48V d.c.	29-48V d.c.	27-48V d.c.
Max. Input voltage [V].....:	60 V d.c.		
Max. Continuous Input current [A].....:	4*11,5A d.c.		4*10,5A d.c.
Nominal Output voltage [V].....:	220/230/240V a.c. 50/60 Hz		
Max. Continuous Output AC current [A].....:	7,5	6	5
Max. Continuous Output power [VA].....:	1500	1200	1000

Model / Type.....:	HM-800 HM-800T	HM-700 HM-700T	HM-600 HM-600T	HM-500 HM-500T
Range of Peak Power MPPT Voltage.....:	34-48V d.c.	33-48V d.c.	29-48V d.c.	27-48V d.c.
Max. Input voltage [V].....:	60 V d.c.			
Max. Continuous Input current [A].....:	2*12,5 A d.c.	2*11,5 A d.c.		2*10,5 A d.c.
Nominal Output voltage [V].....:	220/230/240V a.c. 50/60 Hz			
Max. Continuous Output AC current [A].....:	4,0	3,5	3,0	2,5
Max. Continuous Output power [VA].....:	800	700	600	500

Shanghai (P.R. China), ), May 28<sup>th</sup>, 2020.



Harvey Wang  
Product Line Manager




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LCIE

BV LCIE  
CHINA  
Number

N° 2066AS05BMH35313

Model / Type.....:	HM-250 HM-250A HM-250T	HM-300 HM-300A HM-300T	HM-350 HM-350A HM-350T	HM-400 HM-400A HM-400T	HM-450 HM-450A HM-450T
Range of Peak Power MPPT Voltage.....:	27-48V d.c.	29-48V d.c.	33-48V d.c.	34-48V d.c.	
Max. Input voltage [V].....:	60 V d.c.				
Max. Continuous Input current [A].....:	10,5 A d.c.	11,5 A d.c.		12,5 A d.c.	14 A d.c.
Nominal Output voltage [V].....:	220/230/240V a.c. 50/60 Hz				
Max. Continuous Output AC current [A].....:	1,25	1,5	1,75	2	2,25
Max. Continuous Output power [VA].....:	250	300	350	400	450

Shanghai (P.R. China), ), May 28<sup>th</sup>, 2020.



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Product Line Manager



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**BUREAU  
VERITAS**

## Zertifikat für den NA-Schutz

**Hersteller / Antragsteller:** Hoymiles Converter Technology Co., Ltd.  
No. 18 Kangjing Road, HangZhou,  
Zhejiang Province  
China

<b>Typ NA-Schutz:</b>	<b>Integrierter NA-Schutz</b>
<b>Zugeordnet zu Erzeugungseinheit Typ:</b>	<b>HM-1500, HM-1200, HM-1000, HM-1500T, HM-1200T, HM-1000T</b>

**Firmwareversion:** V01.01.00

**Netzanschlussregel:** VDE-AR-N 4105:2018-11 – Erzeugungsanlagen am Niederspannungsnetz  
Technische Mindestanforderungen für Anschluss und Parallelbetrieb von Erzeugungsanlagen am Niederspannungsnetz

**Mitgeltende Normen / Richtlinien:** DIN VDE V 0124-100 (VDE V 0124-100):2019-09 – Netzintegration von Erzeugungsanlagen – Niederspannung  
Prüfanforderungen an Erzeugungseinheiten vorgesehen zum Anschluss und Parallelbetrieb am Niederspannungsnetz

**Der oben bezeichnete NA-Schutz wurde nach der Prüfrichtlinie VDE 0124-100 geprüft und zertifiziert. Die in der Netzanschlussregel geforderten elektrischen Eigenschaften werden erfüllt:**

- Einstellwerte und die Abschaltzeiten
- Funktionstüchtige Wirkungskette „NA-Schutz-Kuppelschalter“
- Technische Anforderungen der Schalteinrichtung
- Integrierter Kuppelschalters der auch in Verbindung mit einem zentralen NA-Schutz verwendet werden kann (VDE-AR-N 4105:2018:11 §6.4.1)
- Passive Inselnetzerkennung
- Einfehlersicherheit

**Das Zertifikat beinhaltet folgende Angaben:**

- Technische Daten des NA-Schutz und zugehörige EZE Typen
- Einstellwerte der Schutzfunktionen
- Auslösewerte der Schutzfunktionen

**Berichtsnummer:** BMH-ESH-P20031201

**Zertifizierungsprogramm:** NSOP-0032-DEU-ZE-V01

**Zertifikatsnummer:** U20-0228

**Ausstellungsdatum:** 2020-04-03



Zertifizierungsstelle der Bureau Veritas Consumer Products Services Germany GmbH akkreditiert nach DIN EN ISO/IEC 17065  
Eine auszugsweise Darstellung des Zertifikats bedarf der schriftlichen Genehmigung der Bureau Veritas Consumer Products Services Germany GmbH