CERTIFICATE

Certificate number	16867 Rev.0	Replaces	-
Issued	20/07/2021	First edition	20/07/2021
Report number	PKC0004151	Expiry date	19/07/2026
Page	1 of 2	Contract number	PKC0005323

Product Certificate Photovoltaic (PV) Panels

License holder: **GruppoSTG Fabbrica Srl**
Via Pietro Paleocapa 19 – 24122 Bergamo (BG), Italy

Brand name: VGS – Photovoltaic Solutions

Production site(s): GruppoSTG Fabbrica Srl
Via per Castelletto Cervo 397 – 13836 Cossato (BI), Italy

Model(s): VE1YYPVPB-XXX W; VE1YYPV-XXX W; VE3YYPVTB-XXX W
VE3YYPV-XXX W; VE3YYPVMR-XXX W; VE3YYPVFG-XXX W
(where: "YY" = number of solar cells; "XXX" = rated power. 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
  Terrestrial photovoltaic (PV) modules – Design qualification and type approval – Part 1: Test requirements
- IEC 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
  Terrestrial photovoltaic (PV) modules – Design qualification and type approval – Part 2: Test procedures
- IEC 61730-1:2016
  Photovoltaic (PV) module safety qualification – Part 1: Requirements for construction
- IEC 61730-2:2016
  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 1000 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.
Any total or partial reproduction of this document in any form, without Kiwa Cermet Italia express authorization, is prohibited.

Chief Operating Officer
Giampietro Belcredi

Kiwa Cermet Italia S.p.A.
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PRD N° 069B

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Product Certificate Photovoltaic (PV) Panels

Annex

Extended models*

Model name	Cells number	Cell size (mm)	Cell technology	Module size (mm)	Rated power (Wp)
VE172PVPB-XXX W	72	157x157	Poly-Si	1980x1000x40	From 295 to 325 in steps of 5
VE172PV-XXX W	72	157x157	Poly-Si	1980x1000x40	From 300 to 345 in steps of 5
VE372PVTB-XXX W	72	158.75x158.75	Mono-Si	1980x1000x40	From 340 to 375 in steps of 5
VE372PV-XXX W	72	158.75x158.75	Mono-Si	1980x1000x40	From 355 to 395 in steps of 5
VE160PVPB-XXX W	60	157x157	Poly-Si	1650x1000x40	From 245 to 270 in steps of 5
VE160PV-XXX W	60	157x157	Poly-Si	1650x1000x40	From 260 to 285 in steps of 5
VE360PVTB-XXX W	60	158.75x158.75	Mono-Si	1650x1000x40	From 280 to 310 in steps of 5
VE360PV-XXX W	60	158.75x158.75	Mono-Si	1650x1000x40	From 295 to 325 in steps of 5
VE372PVMR-XXX W	72	158.75x158.75	Mono-Si	1980x1000x40	From 290 to 320 in steps of 5
VE372PVFG-XXX W	72	158.75x158.75	Mono-Si	1980x1000x40	From 315 to 345 in steps of 5
VE360PVMR-XXX W	60	158.75x158.75	Mono-Si	1650x1000x40	From 260 to 285 in steps of 5
VE360PVFG-XXX W	60	158.75x158.75	Mono-Si	1650x1000x40	From 250 to 275 in steps of 5

Remarks: XXX = rated power. VE172PVPB-XXX W, VE372PVTB-XXX W, VE160PVPB-XXX W, VE360PVTB-XXX W, VE372PVMR-XXX W, VE372PVFG-XXX W, VE360PVMR-XXX W, VE360PVFG-XXX W = modules with black/black backsheet. VE172PV-XXX W, VE372PV-XXX W, VE160PV-XXX W, VE360PV-XXX W = modules with white/white backsheet. VE372PVMR-XXX W, VE360PVMR-XXX W = modules with red superstrate. VE372PVFG-XXX W, VE360PVFG-XXX W = modules with green superstrate.

Chief Operating Officer
Giampiero Belcredi

Laboratory test reports nr.: 679.0CI0262/21; L0004151/A rev.00; L0004151/B rev.00; L0004501 rev.00; L0004151/C1 rev.00; L0004151/D1 rev.00; L0004151/C2 rev.00; L0004151/D2 rev.00; L0004601/A rev.00; L0004601/B rev.00; L0004151/E1 rev.00; L0004151/E2 rev.00.

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