

Unit Certificate



FGW TG8 EZE

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ID 1900000000

No.: 968/GI 1566.01/22

Grid Integration of Distributed Energy Resources

Certificate Holder Sungrow Power Supply Co., Ltd. **Manufacturer** see certificate holder
No.1699 Xiyou Rd.,New & High
Technology Industrial Development
Zone,
Hefei 230088 Anhui P.R.
China

Subject Grid-Connected PV Inverter
SG285HX, SG350HX

Codes and Standards VDE-AR-N 4110:2018 FGW TR 4:2019 Revision 9
VDE-AR-N 4120:2018 FGW TR 3:2018 Revision 25
FGW TR 8:2019 Revision 9

Scope and result The power generating units mentioned above meet the requirements of VDE-AR-N 4110:2018-11 and VDE-AR-N 4120:2018-11. The conformity is declared by following documents:
Evaluation Report-No.: 968/GI 1566.01/22, dated 19.10.2022
Validation Report-No.: 968/GI 1566.00/22, dated 19.10.2022
Test Report No.: CN22Y1D8001, dated 08.06.2022

The manufacturer has provided proof of certification of the quality management system of his production facility in accordance with ISO 9001 or is subject to production monitoring.

Specific provisions The deviations and conditions for conformity according to the evaluation report must be observed. The corresponding conditions and deviations are listed on page 2 of the certificate.

Valid until 2027-10-21

The issue of this certificate is based upon an evaluation in accordance with the Certification Program CERT GI3 V1.0:2017 in its actual version, whose results are documented in Report No. 968/GI 1566.01/22 dated 2022-10-19. This certificate is specifically valid for the above mentioned system only. It becomes invalid, if any unapproved changes are implemented without prior assessment/approval by the certification body. Authenticity and validity of this certificate can be verified through the above indicated QR-code or at <http://www.fs-products.com>.

TÜV Rheinland Industrie Service GmbH
Bereich Automation
Funktionale Sicherheit
Am Grauen Stein, 51105 Köln

Köln, 2022-10-21

Certification Body Safety & Security for Automation & Grid

Dipl.-Ing. Marco Klose

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TÜVRheinland[®]
Precisely Right.

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Technical data of the PGU:

Typ:	SG285HX	SG350HX
Max. apparent power:	285 kVA	352 kVA
Rated active power:	285 kW	320 kW
Max. active power (P_{600}):	285.03 kW	349.7 kW
Rated current:	206 A _{AC}	254 A _{AC}
Rated voltage:	800 V _{AC}	
Nominal frequency:	50 Hz / 60 Hz	
Minimum required short-circuit power (only for type 1 PGU):	N/A	
Software-Version:	LCD_EUCLASE-S_V11_V01_A; MDSP_EUCLASE-S_V11_V01_A	

Validated Simulation Model:

Reference name: VDE_SG350HX_Pf2020.pfd

MD5 Checksum: 7d1c6c369f5df7c942617394364a43ea

Simulation platform: DlgSILENT PowerFactory 2020

The following deviations and restrictions apply:

None

The following:

- The certified product does not provide a test terminal. A connecting terminal plate has to be installed separately, if necessary.
- It is not possible that protective disconnection functions can be parameterized and readable directly on the machine, without using any additional device. An appropriate device to check the protection settings has to be provided on demand or should be stored on site.

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- The PGU contains one single interface for active power setpoint by grid operator or any different third party (e.g. direct marketer). Separate implementation of the interfaces for the grid provider specification and other setpoint specifications, including implementation of the lowest value in accordance with VDE-AR-N 4110/VDE-AR-N 4120, must therefore be implemented at the PGS level (e.g. in the PGS controller). This must be considered accordingly during system certification.
- The validated simulation model of the PGUs shall be used in the certified version (see table for details on file name and check sum (MD5))

Schematic overview of the PGU:

