

# Unit Certificate



FGW TG8 EZE

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**No.: 968/GI 1464.03/25**

**Grid Integration of Distributed Energy Resources**

## Certificate Holder

Sungrow Power Supply Co., Ltd.  
No.1699 Xiyou Rd., New & High  
Technology Industrial Development  
Zone,  
Hefei 230088 Anhui P.R.  
China

## Subject

Grid-Connected PV Inverter  
**SG75CX-P2, SG110CX-P2, SG125CX-P2**

## Codes and Standards

VDE-AR-N 4110:2023  
VDE-AR-N 4120:2018  
FGW TG 3:2018 Revision 25  
FGW TG 4:2019 Revision 9  
FGW TG 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:  
Report-No.: 968/GI 1464.03/25, dated 2025-08-05  
Validation Report-No.: 968/GI 1464.00/22, dated 2021-06-21  
Test Report No. CN223AA4 002, dated 2024-10-17

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 2027-06-23

The assessment report-no.: 968/GI 1464.03/25 dated 2025-08-05 is an integral part of the certificate. 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, 2025-08-05

Certification Body Safety & Security for Automation & Grid

Dipl.-Ing. Marco Klose

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## Technical data of the PGU:

<b>Typ:</b>	SG75CX-P2	SG110CX-P2	SG125CX-P2
<b>Rated apparent power:</b>	75.0 kVA	110.0 kVA	125.0 kVA
<b>Rated active power:</b>	75.0 kW	110.0 kW	125.0 kW
<b>Max. active power (<math>P_{600}</math>):</b>	75.0 kW	110.0 kW	125.0 kW
<b>Rated voltage:</b>	400 V <sub>AC</sub>		
<b>Nominal frequency:</b>	50 Hz / 60 Hz		
<b>Minimum required short-circuit power (only for type 1 PGU):</b>	N/A		
<b>Software-Version:</b>	LCD_GARNET-S_V11_V01_A MDSP_GARNET-S_V11_V01_A		

## Validated Simulation Model:

**Reference name:** VDE\_SG125CX-P2\_PF2020.pfd

**MD5 Checksum:** be36de13138e7312353aa1f39b550428

**Simulation platform:** DIgSILENT PowerFactory 2020

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The following deviations and restrictions apply:

☐ None

☒ The following:

- A voltage deadband cannot be set for Q(U)-control. If required, this has to be implemented on PGS level (e.g. via PGS controller).
- An external interface for specifying the reference voltage  $U/U_c$  for Q(U) control is not implemented. If required, this has to be implemented on PGS level (e.g. via PGS controller).
- The PGU control only supports three reference points for Q(P) control. If more reference points are needed, the Q(P) control must be implemented on PGS level (e.g. by PGS controller).
- 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, must therefore be implemented at the PGS level (e.g. in the PGS controller). This must be considered accordingly during system certification.
- Active power prioritization with regard to primary power supply has to be implemented on PGS level (e.g. by PGS-controller) and be evaluated as part of system certification, if required.
- The function tests with regard to compensation to ensure substation supply operation or rapid resynchronization were not performed during unit certification and have to be evaluated as part of system certification, if required.
- As the unit does not contain a display, this has to be considered on project level. With regard to the requirements of the corresponding grid provider, an appropriate device to check the protection settings has to be provided on demand or should be stored on site.
- The certified product does not provide a test terminal. A connecting terminal plate has to be installed separately, if necessary. Alternatively, this requirement can be fulfilled on PGS level through an intermediate decoupling protection device with valid component certificate according to VDE-AR-N 4110 and separate circuit breaker.
- The validated simulation model of the PGUs specified shall be used in the certified version (see information above for details on file name and check sum (MD5)).

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## Schematic overview of the PGU:

