

Certificate

GoodWe Technologies Co., Ltd.
No.90 ZiJin Rd., New District,
Suzhou, 215011,
China

Type of unit	Grid-Tied PV Inverter (Type 2)	
Description of unit	GW50K-SDT-C30	
Technical data	Detail see the ANNEX	
Certification scheme	P30VA01 Rev. 09/11.24	TÜV NORD: Certification Process for Grid Integration Certification
Standard	VDE-AR-N 4105 2018-11	Generators connected to the low-voltage distribution network- Technical requirements for the connection to and parallel operation with low- voltage distribution networks
Additional standards	DIN VDE V 0124-100 2020-06	Grid integration of generator plants - Low-voltage - Test requirements for generator units to be connected to and operated in parallel with low-voltage distribution networks

The generating unit complies with the requirements contained in the certification programmers and standards and directives listed above, with restrictions. Further details and technical data can be found in the annex 1, consisting of 4 pages.

Certificate Registration No. 44 798 23053448
Audit Report No. 3539 6172

Valid from 2025-06-17
Type 1a Certificate

Essen, 2025-06-17



Certification Body at TÜV NORD CERT GmbH

TÜV NORD CERT GmbH
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Annex

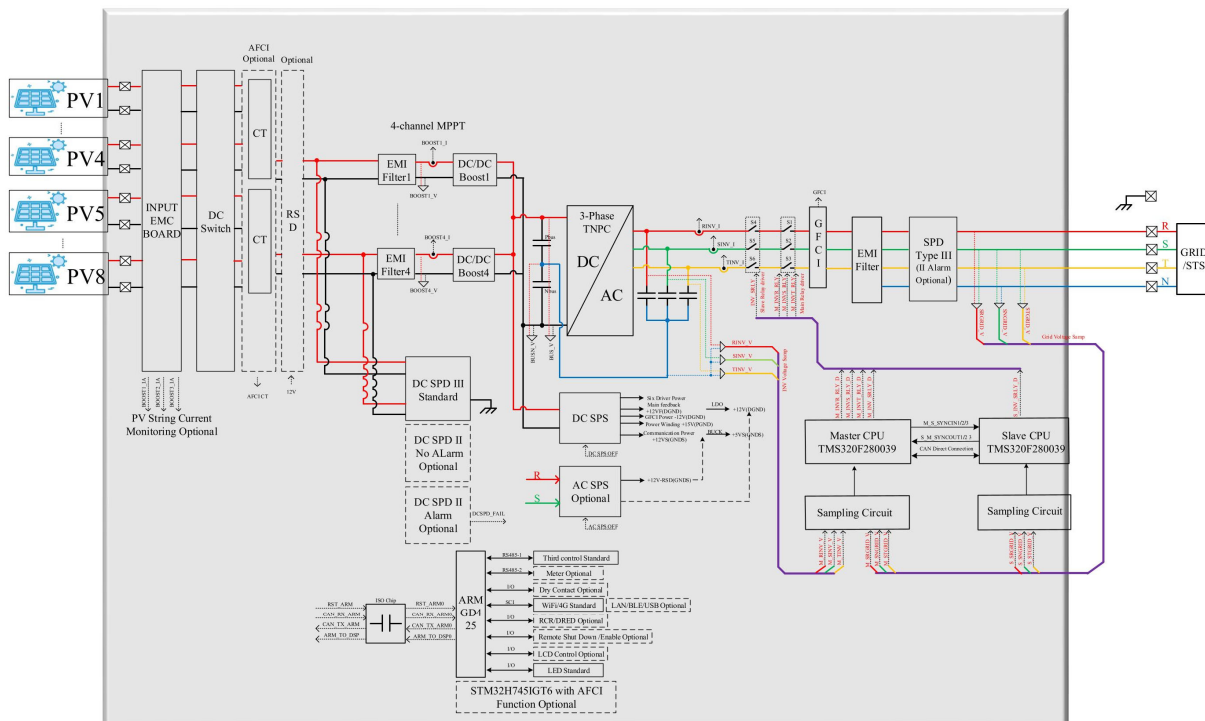
to Certificate Registration No. 44 798 23053448

VDE-AR-N 4105: 2018-11

DIN VDE V 0124-100: 2020-06

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Schematic structure



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VDE-AR-N 4105: 2018-11

DIN VDE V 0124-100: 2020-06

Technical Data

General information

General	
Type of EZE	Type 2 / Grid-Tied PV Inverter
Designation	GW50K-SDT-C30
On-grid variables	
Rated apparent power S_{rE}	50000 VA 50000 VA (max)
Rated effective power P_{rE}	50000 W 50000 W (max)
Max. effective power P_{Emax}	49933.69 W (0.999 P_{Emax})
Max. apparent power S_{Emax}	50387.90 VA (1.008 S_{Emax})
Rated voltage U_r	230/400, 3L/N/PE
Rate current I_r	72.4 A
Initial short-circuit alternating current I''_k	86.9 A
Reactive power adjustment range $\cos \varphi$	~1 (Adjustable from 0.8 leading to 0.8 lagging)
Rated frequency f_n	50 Hz
PV – Input Variables	
Min. MPP voltage	140 V
Max. MPP voltage	1000 V
Max. DC input voltage	1100 V
Number of MPPT	4
Max. input current	40 A/40 A/40 A/40 A
Isc PV	52 A/52 A/52 A/52 A
DC – Input variables	

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VDE-AR-N 4105: 2018-11

DIN VDE V 0124-100: 2020-06

Type /MOS module	IKY140N120CH7 & SGTQ120V75SDB1PWD
Quantity DC Link Capacitor	8
Clock frequency	16kHz
Type of power control	PWM
Max. Output current (only for MOS)	IKY140N120CH7:140A SGTQ120V75SDB1PWD: 120A
Software versions	V1.01.01
Generation unit Control	
Manufacturer	GoodWe Technologies Co., Ltd.
Software version	V1.01.01
Protection device	
Manufacturer	ZETTLER RELAY (XIAMEN) Co., Ltd
Type	Integrated guard
Switch-off unit (AC)	AZSR190T-1AE-12D
Software versions	V1.01.01

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VDE-AR-N 4105: 2018-11

DIN VDE V 0124-100: 2020-06

Notes

The manufacturer has proven for the manufacturing facility of the Unit a certification of its quality management system according to ISO 9001. The manufacturer confirmed in a manufacturer declaration that the certification of the management system will be valid parallel to the period of this unit certification.

Additional technical data, according to VDE-AR-N 4105, are given in the assessment report (appendix A1).

The use of other firmware and software version numbers is allowed if the differences are proved and confirmed by TÜV NORD CERT GmbH beforehand. Validity of a new software version is attested by written confirmation and becomes part of the certificate.

The inverter has an integrated tie breaker and no central tie breaker. The specifications of VDE-AR-N 4105 for central NA protection in combinations with central or integrated tie switches must be observed and implemented at the level of the generating plant.

Restrictions

None

Appendix to the certificate

A1 Assessment report no. 35396172 version V1.0

A2 Extract from the test report (according to VDE-AR-N 4105 annex E.5)
TÜV NORD Testing (Suzhou) Co., Ltd., extract No. RDPVP03049/25B/01 A1 from Jun. 10, 2025

A3 Extract from the test report (according to VDE-AR-N 4105 annex E.7)
TÜV NORD Testing (Suzhou) Co., Ltd., extract No. RDPVP03049/25B/01 A2 from Jun. 10, 2025

A4 Manufacturer declaration for GW50K-SDT-C30 from May. 07, 2025

End of the List

Essen, 2025-06-17



Certification Body at TÜV NORD CERT GmbH