



Certificate of compliance

Applicant: GoodWe Technologies Co., Ltd.
No.90 Zijin Rd., New District, Suzhou, 215011
P.R. China

Product: Battery inverter with PV input with off-grid functionality

Model(s): GW5K-ES-LD-G10
GW7.5K-ES-LD-G10
GW10K-ES-LD-G10

The certificate refers to the stated model(s) which passed the tests according to the applicable standard(s):

Applied rules and standards:

IEC 62109-1:2010, EN 62109-1:2010, DIN EN 62109-1:2011
Safety of power converters for use in photovoltaic power systems – Part 1: General requirements
IEC 62109-2:2011, EN 62109-2:2011, DIN EN 62109-2:2012
Safety of power converters for use in photovoltaic power systems - Part 2: Particular requirements for inverters

Note:

The stated inverters above are intended for two-phase grid connection (2L/N/PE) at the following grids:
2L/N/PE, 120/208Vac, 127/220Vac, 60Hz
2L/N/PE, 120/240Vac, 127/254Vac, 60Hz

At the time of issue of this certificate, the safety concept of an aforementioned representative product corresponds to the valid safety specifications for the specified use in accordance with regulations.

Report number: PV2506WDG0243-3
Certificate number: U25-0849

Certification Program:
Date of issue:

NSOP-0038-DEU-ZE-V02
2025-09-22

Certification body

Accreditation



Georg LORITZ
Lab Supervisor Energy Systems



Accredited certification body by Deutsche Akkreditierungsstelle GmbH (DAkKS) according to ISO/IEC 17065. The accreditation is valid only for the scope listed in the annex of the accreditation certificate D-ZE-12024-01-00. The Deutsche Akkreditierungsstelle GmbH (DAkKS) is signatory of the multilateral arrangements of EA, ILAC and IAF for mutual recognition.

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Type Approval and declaration of compliance with the requirements of IEC 62109-1:2010, EN 62109-1:2010, DIN EN 62109-1:2011 and IEC 62109-2:2011, EN 62109-2:2011				
Manufacturer / applicant	GoodWe Technologies Co., Ltd. No.90 Zijin Rd., New District, Suzhou, 215011 P.R. China			
Product type	Battery inverter with PV input with off-grid functionality			
Static converter model	GW5K-ES-LD-G10	GW7.5K-ES-LD-G10	GW10K-ES-LD-G10	--
Input (PV DC)				
MPP voltage range [V]	50-550	50-550	50-550	--
Max. input voltage [V]	600,0	600,0	600,0	--
Max. input current per MPPT [A]	20,0/20,0	40,0/20,0	40,0/40,0	--
Input (DC battery)				
DC voltage range [V]	40-60	40-60	40-60	--
Max. charge / discharge current [A]	120,0/120,0	165,0/165,0	220,0/220,0	--
Output (AC)				
Rated AC voltage [V]	2L/N/PE, 120/208Vac, 127/220Vac, 60Hz; 2L/N/PE, 120/240Vac, 127/254Vac, 60Hz;	2L/N/PE, 120/208Vac, 127/220Vac, 60Hz; 2L/N/PE, 120/240Vac, 127/254Vac, 60Hz;	2L/N/PE, 120/208Vac, 127/220Vac, 60Hz; 2L/N/PE, 120/240Vac, 127/254Vac, 60Hz;	--
Max. output current [A]	24,0 (120/208Vac); 22,7 (127/220Vac); 20,8 (120/240Vac); 19,7 (127/254Vac)	36,1 (120/208Vac); 34,1 (127/220Vac); 31,3 (120/240Vac); 29,5 (127/254Vac)	48,1 (120/208Vac); 45,5 (127/220Vac); 41,7 (120/240Vac); 39,4 (127/254Vac)	--
Nom. converter output (P _{NINV}) [kW]	5,0	7,5	10,0	--
Rated apparent power [kVA]	5,0	7,5	10,0	--
Generator				
Rated input AC voltage [V]	2L/N/PE, 120/208Vac, 127/220Vac, 60Hz; 2L/N/PE, 120/240Vac, 127/254Vac, 60Hz;	2L/N/PE, 120/208Vac, 127/220Vac, 60Hz; 2L/N/PE, 120/240Vac, 127/254Vac, 60Hz;	2L/N/PE, 120/208Vac, 127/220Vac, 60Hz; 2L/N/PE, 120/240Vac, 127/254Vac, 60Hz;	--
Max. input current [A]	40,0	40,0	40,0	--
Max. input AC power [kVA]	5,0	7,5	10,0	--
Back-up				
Rated AC voltage [V]	2L/N/PE, 120/208Vac, 127/220Vac, 60Hz; 2L/N/PE, 120/240Vac, 127/254Vac, 60Hz;	2L/N/PE, 120/208Vac, 127/220Vac, 60Hz; 2L/N/PE, 120/240Vac, 127/254Vac, 60Hz;	2L/N/PE, 120/208Vac, 127/220Vac, 60Hz; 2L/N/PE, 120/240Vac, 127/254Vac, 60Hz;	--
Max. output AC current [A] [Bypass]	63,0	63,0	63,0	--
Nominal output active power [kW]	5,0	7,5	10,0	--

Max. output apparent power [kVA] [Bypass]	13,8	13,8	13,8	
Firmware version	000001			
Description of the structure of the power generation unit: The power generation unit is equipped with a DC and line-side EMC filter. The power generation unit has no galvanic isolation between DC input and AC output. Output switch-off is performed with single-fault tolerance based on the inverter bridge and two series-connected relays in each line and neutral. This enables a safe disconnection of the power generation unit from the network in case of error.				